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Deciphering the Language of Etruscan Dress: a Hierarchical Clustering Analysis Re-Tailoring Tarquinian Tomb Painting

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Abstract

Deciphering the Language of Etruscan Dress: a Hierarchical Clustering Analysis Re-Tailoring Tarquinian Tomb Painting

By Daniel Brown

Tarquinian tomb paintings are of an unrivalled artistic and cultural importance. The primary aim of this thesis is to identify and investigate their pictorial forms, language, and structures of painted dress, so as to re-tailor understanding of Tarquinia, its tombs, and its tomb paintings throughout the Archaic and Classical periods of ancient Italy (approx. 6th – 2nd century BC). Tarquinian painted dress is examined by the application of an original methodological approach, which identifies and investigates the structures of painted dress through the application of a hierarchical clustering analysis. Thereby, the thesis emphasises the significant versatility of dress as an investigative tool in the ancient world, and expands its study, and extends its forms of analysis. Methodologically, it innovatively quantifies Tarquinian tomb painting, which contrasts the typical qualitative and anecdotal methods usually applied when dealing with such visual imagery depicted amidst archaeological contexts. The analysis makes use of numerical procedures to divide a group of given units into homogeneous sub-groups, which allow for the visual inspection of an otherwise complex set of data-matrices. This statistically examines painted dress's relationships to identify groupings of similarity from within a heterogeneous data-matrix. Seeking deeper structures not readily apparent on the surface, or revealed by more traditional modes of analysis, the study facilitates identification of painted dress's arrangements, and examines their groupings by applying key tenets of contemporary dress theory. Trends of typological regularity, high frequency, but weak associative strength belonging to 6th – 5th century BC painted dress groupings are identified, as are trends of typological irregularity, low frequency, but strong associative strength, identified as belonging to 4th – 3rd/2nd century BC groupings. Thus, this study contributes a hitherto unidentified varying manipulation of non-verbal sartorial communication, which indicates consciously shifting choices, priorities, intentions, and decisions as to the communicative utilization of painted dress from the 6th – 3rd/2nd century BC. Therefore, painted Tarquinian dress is identified as a key form of non-verbal communication that conveys previously overlooked socio-cultural information, but the thesis also repositions tomb painting as a communicative device. Consequently, it provides new insight into Etruscan dress's and painted tombs' broader significance amidst wider Etruscan society.

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1. Introduction

Dress is the most communicative aspect of material culture (Cleland, Davies & Llewellyn-Jones, 2007: viii). It possesses recognizable, coherent and significant organizational groupings that constitute an intentional form of non-verbal communication (see Barthes, 1973: 27). Tarquinian tomb painting comprises the only extant assemblage of large-scale paintings from the classical world before the Roman period (Pallottino, 1952: 7). They are one of the most important sources of information for understanding Etruscan culture, art, life, religion, burial customs, ritual, and death from anywhere in the ancient world (Steingraber, 2013: 655). Crucially, they present an invaluable assemblage of representations for better understanding ancient dress, and its communicative potential. The special significance of tomb painting from Tarquinia lies in the assemblage of pictorial dress that they present. This thesis examines the pictorial forms and language of Tarquinian painted dress by the application of an innovative methodological approach, which identifies and investigates the structures of painted dress through the application of a hierarchical clustering analysis. It argues how the data produced by such an innovative approach to dress can retailor understanding of Tarquinia, its tombs, and its tomb paintings throughout the Archaic and Classical periods of ancient Italy (approx. 6th – 2nd century BC). The study enhances existing approaches toward Etruscan dress by contrasting its maligned and unimaginative study with key tenets of contemporary dress theory. It demonstrates the 'fashionological' (Kawamura, 2005: 1) and linguistic theories, as well as the statistical methods, which can be deployed to exploit the communicative potential of the dress depicted throughout the tomb paintings of Tarquinia. Furthermore, it illustrates the interactions between dress, language, and tomb painting to explore painted costumes, styles, and fashions, or a lack thereof, and to accentuate dress as an applicable investigative tool. Similarly to Gleba (2008), Quercia and Foxhall (2014), Lee (2015), and Llewellyn-Jones (2003), the thesis recognizes the importance of ancient dress, expands its study, and extends its forms of analysis.

Ancient dress was a crucial component in the dynamic system of communication within and between societies (Colburn & Heyn, 2008: 3). It was used to shape and communicate identity, facilitate interaction, negotiate difference, and to create or traverse sociological boundaries (Colburn & Heyn, 2008: 6). The active process of adorning the body draws from a shared linguistic repertoire that was used to communicate, or to conceal, a host of socio-cultural identities, such as age, personhood, class, ethnicity, sex, gender, or social status (Colburn & Heyn, 2008: 7). This chapter reviews how Etruscan dress can be more effectively and objectively exploited by interweaving linguistic conceptions of nonverbal communicative systems through Tarquinian depictions of dress (see Barthes, 1983). It presents the demonstrable feasibility of dress studies in historical contexts, even in the absence of living informants, or complete garments (see Lee, 2015: 19). Furthermore, it defines Tarquinian tomb paintings, and their language

of dress, as products of a meaningfully constructed, complicated and negotiated Etruscan environment (see Izzet, 2001: 186). The chapter also discusses the marginalization of Etruscan dress within the discipline of classical archaeology and Etruscology, and how incorporation of the theoretical literature on dress that has developed outside the field of classics in the broader field of dress studies can improve the utilization of painted Tarquinian dress (see Lee, 2015: 18). It too articulates why, as an area of study typically limited to the direct evidence of its art (Bonfante, 2003: 2), Etruscology must re-tailor its approach to painted Tarquinian tombs so as to more effectively exploit their communicative capacities.

Despite the approximately 200 painted tombs depicting Tarquinian dress, the subject of its dress has received only minimal attention (see Bonfante, 2003: 1), and has all too often been interpreted according to Roman or Greek standards (Bonfante, 1971: 281). Greek dress can be studied from Bieber's volumes (1959; 1961; & 1961a), and Roman dress is thoroughly examined by the works of Alfoldi (1952; 1963), Delbrueck (1933), and Wilson (1924; 1938). Furthermore, the long history of Greek and Roman dress research is continually supplemented by studies such as Lee (2015), Llewellyn-Jones (2002; 2003; & 2012), Olson (2008), Croom (2000), and Cleland, Llewellyn-Jones, and Davies (2007), which are influenced by contemporary dress theory, and encompass differing aspects of dress; whereas, Etruscan dress has been comparatively ignored.

Bonfante (1975) offers the most comprehensive work to concern itself with this neglected area of Etruscology. Yet, similarly to earlier Greek and Roman dress studies it is modelled on outdated approaches to dress history and focuses on the re-creation of ancient dress, concerned primarily with how such dress was draped and pinned in order to re-enact drama, sculpture, or paintings (Harlow et al, 2005: xii). It is akin to an explanatory catalogue, rather than a *working tool* through which to assess the cultural importance and structures of Etruscan dress (Bonfante, 2003: 1). The overriding interests in issues of connoisseurship, formal analysis, and stylistic development, have produced little more than typologies and description (Lee, 2015: 18). There has been a systemic lack of engagement with contemporary dress theory to create analytical models that utilize visual representations of dress as a tool for investigating ancient life, ancient mores, and ancient cultural responses (Harlow et al, 2005: xiii). By ignoring the extensive theoretical literature on dress developed outside the field of classical archaeology and Etruscology, many 'studies' of ancient dress ignore basic, but important principles (Lee, 2015: 18). They ignore where, when, how, and why dress 'goes together' (see Barthes, 1973). Thereby they fail to move beyond the ethnographic museum display model (Lee, 2015: 19), as they neither further understanding of the social functions of Etruscan dress nor sufficiently demonstrate its cultural importance (Harlow et al, 2005: xii).

The paucity and limitation of Etruscan dress studies can be partially explained by the poor preservation of textiles and the consequent fetishism of the few materials and products that have

survived. The few textiles that do remain are in the form of minute pseudo-morphs; so minute they often go unnoticed and unpublished (Gleba, 2007: 4). Consequently, archaeological case studies of dress have been conditioned to focus on singular classes of artefact such as garment fasteners or toilet articles, rather than the appearance of the dressed individual as a whole, which is difficult to reconstruct from the fragmentary surviving evidence (Lee, 2015: 27). However, the social meanings attached to dress are not wholly recoverable from *technical* analyses of singular textiles (Lee, 2015: 27). *Technical* textile analysis, although undeniably valuable, does not examine dress, but rather it is the artistic representations of dress that more closely reflect its non-verbally communicative significance, as they present its type structures, as well as its complex social, political, and economic baggage, more so than documentary evidence or remnant garments (Ribeiro, 1998: 320). The pictorial representation of dress means that it was important, that it had some meaning, and that its painted type arrangements possess deliberate and manipulative significance (see Bonfante, 2009: 183). Pictorial representations present structures of dress, which mediate a myriad of social categories that can be readily investigated (Sorensen, 1997: 93).

The largest groups of surviving textile remains still in their organic shape have been excavated at Verucchio (see Eles, 1994; 2002; & Stauffer, 2012), and at Sasso di Furbara whereby a number of wool textile fragments were retrieved (see Masurel, 1982; Mamez & Masurel 1992). Other finds come from Casale Marittimo and Cogion Coste di Manone (Gleba, 2013: 805). A number of the textiles at Verucchio, along with a furry nap, which imitate animal skins, apparently having been used for blankets or coverings, rather than for garments, but their existence demonstrates the technical ability to produce such cloth (Bonfante, 2009: 184). These comparatively minute traces of evidence provide a considerable amount of technical information about ancient textiles and processes of technological development (Gleba, 2013: 806). They reveal familiarity with diverse fibres, dyes and sophisticated weaving techniques; such as loom weaving, tablet weaving, soumak and types of twining (Gleba, 2013: 800). They also demonstrate that Etruscan textile traits and techniques were related more to those of Central Europe, rather than to Greek textile craft traditions (Barber, 1991: 194). The archaeologically recovered textile material and the significant amount of plaids, diagonals, chevrons, diamonds, and fancy borders depicted by Etruscan artistic representation (see Bonfante, 2003), suggests that the Etruscan's made their textiles using similar techniques to Hallstatt weavers (Barber, 1991: 194). As well as indicating networks of material and information exchange (Gleba, 2013b: 8) textile remains also illuminate aspects of socioeconomic organization, funerary ritual, sexual differentiation of labour, elite exchange, and the emergence of complex urban communities (Gleba, 2008).

Yet, although significant, remnant archaeological textiles do not impart, for example, what compositions of dress they constituted, what dress types were worn together, the varying combina-

tions of dress, how the dress was worn, its bodily affect and viewer effect, who wore such dress, and where and when it was worn. Archaeological textiles do not comprise dress, but instead singular types of dress, its individual constituent components, which neglects the arrangement of the multiple types of dress that created ancient dress compositions, and thereby much of the communicative significance of dress is missed. This is limiting given the social, economic, political and symbolic importance of dress and textiles (Bonfante, 2009: 185). Moreover, the environmental conditions of the Italian peninsula are not conducive to the survival of textile material (Gleba, 2016: 237), and so the abundant visual representations of dress provide the ideal counterpart to investigations of the comparatively rare textile material by providing additional insight into the use of dress as non-verbal communication.

Technical textile studies can struggle to see beyond their artefacts, and to appreciate that singular textile remains do not alone comprise the totality of a wearer's non-verbally communicative system of dress (see Miller, 2005c: 212 for example). However, there is much to be said for the recent development of new analytical techniques that permit more precise fibre and dye identification, and the proliferation of technical studies that allow a more synthetic approach to the history of textiles and textile technology (Gleba, 2016: 237). Not only do new methods such as isotopic tracing, radiocarbon dating, dye analysis, and X-ray spectroscopy (see Gleba, 2016: 244), demonstrate how much can be learned about the culture, society, technology, and economy of the ancient world through textiles, but they can also place them in their archaeological context (Gleba, 2016: 237). Similarly to these advances it too is necessary to develop new methodological approaches to enhance the examination of pictorial representations of dress and textiles, so as to overcome the limiting art-historical tradition that has dominated studies of Etruscan art (see Perkins, 1999). Art-historical approaches ignore the communicative significance of painted dress and textiles, as well as their wider material and social contexts, and they lack the systematic rigor afforded by quantitative analyses (Izzet, 2007a: 114). Like the study of textiles and textile technologies in the ancient world, the study of pictorial dress and textiles requires an innovative methodological shift in perspective so as to better generate and integrate data that can also contribute to clarifying the larger sartorial picture of Etruria (see Gleba, 2016: 244).

Etruria provides an invaluable case study for examining dress in the ancient world because it provides both visual and archaeological evidence, which can support and supplement one another when effectively exploited and integrated. The matter of textiles and dress is now becoming embedded in approaches to antiquity, rather than remaining peripheral (Harlow & Nosch, 2014: 2). Particularly, a more comprehensive view of textiles and textile production as an important part of the ancient Mediterranean economy is emerging, which affords it equal weight to other crafts such as the manufacture of metal and ceramic goods (Gleba, 2016: 244). Textiles and textile production are increasingly recognized as an integral part of local and regional

economies and local, regional and international trade (Gleba, 2013: 808). Etruscan textile trade has been tied to salt, amber, slaves, and other commodities (Gleba, 2013: 807; see Briggs, 2003: 253). Furthermore, archaeological remains of textiles are important for developing investigations of craft specialization, workshop production, division of labour and gender, and the geographical and chronological variations of textiles can help to explain how its production technologies were transmitted between different geographical areas (Gleba, 2016: 244). Moreover, as one of the most important and labour-intensive crafts of the ancient world, textile and textile production was socially significant throughout Etruria, as demonstrated by the inclusion of textile implements among burial goods, as well as the deposition of textile tools in votive and foundation deposits (Gleba, 2013: 808; also see Gleba, 2009). Textiles and textile production, beyond funerary ritual and religious activity, have a strong affinity with both group and individual identity, and with notions of intimacy and hygiene (Harlow & Nosch, 2014: 2). Frequently, textiles documented by texts and images, or found archaeologically, reflect high quality and luxury items (Gaspa et al, 2017: 22). Yet, textiles remain relevant to everyone, everyday, and have been significant for over 10,000 years (see Gleba & Mannering, 2012 for example), and their continuing centrality to daily life mirrors their essential ubiquity in antiquity (Harlow & Nosch, 2014: 4).

Tarquinian tomb painting indicates the ubiquity and significance of textiles. Alongside dress the paintings depict objects such as colourful bed covers, cushions, tablecloths, wall hangings, and other utilitarian textiles (Gleba, 2013: 798). Moreover, some tombs are painted to represent tents or pavilions with roofs made of cloth, as the checks and small flowers depicted on tomb ceilings 'unquestionably' allude to textile patterns (see Stopponi, 1983: 39-41; or Naso, 1996a: 349–352). Textile's ubiquity is such that it can be aptly labelled the protagonist of Tarquinian tomb painting. Furthermore, various technical and social aspects of textile production in Etruria are depicted by iconographic monuments (Gleba, 2016: 237). For example, a 7th century BC wooden cylindrical throne contains a scene related to textile production (see Meyers, 2016), and a 6th century BC bronze rattle or *tintinnabulum* depicts four scenes of various stages of textile manufacture (Gleba, 2016: 237; see Morigi Govi, 1971; also Bonfante, 1978: 16). These prestige objects indicate that specialized textile production was the prerogative of the elite women represented (Gleba, 2013: 807). Furthermore, such copious depiction of dress and textiles signifies their value and position as both luxury items needed for status display, and for long-distance gift exchange between elites, and that of necessity goods demanded by developing urban communities (Gleba, 2013: 798). The former led to the development of highly specialised craftsmanship and a network of exchange and resource and objection circulation, and the latter developed more organized modes of production and trade (Gleba, 2013: 798).

Textiles and textile production significantly impacted Etruscan society socially, politically, and economically (see Harlow & Nosch, 2014: 4). The Etruscan cultural landscape looked the way it did in part because textiles were a major productive element, and created growth in the production of raw materials, such as grapes, olives, and wheat, particularly as flax and sheep can flourish on land that cannot support other crops (Harlow & Nosch, 2014: 5). Producing the multitude of textiles used on a daily basis by the Etruscans required considerable skills, resources, organization, and planning (Gleba, 2013: 799). Textiles and dress were grown in fields and retted in ponds that quickly became poisonous, or produced from the fleeces of hundreds of thousands of sheep grazing off land and pasture (see Harlow & Nosch, 2014: 5). Thereby, rather unsurprisingly (see Horden & Purcell, 2000: 352) the business of textile production, consumption, and utilization quickly reflected Etruria's evolving social and political relationships from the 8th – 3rd/2nd centuries BC (see Neil, 2016: 25). Textiles and textile production mirror the region's dynamic changes that resulted in the emergence of a highly stratified landscape focused on emergent urban centres (Neil, 2016: 25). The textile demands of more complex political, economic, and social structures (see Neil, 2016: 15) situated textile production among the main economic activities and sources of wealth in Etruria (Gleba, 2013: 808). By the 6th century BC, rather than remaining confined to the household level, a new mode of textile production had developed that demonstrated increasing standardization, and concentration in areas with other kinds of production, which coincides with the specialization and professionalization of other crafts (Gleba, 2013: 807). Textile production was no longer controlled by elites in the same way as it was in the Early Iron Age, and it was instead handled by specialists or even slaves on a more industrialized scale (Gleba, 2012a: 237).

Gradually shifting from production of luxury goods to subsistence goods, and intensification of local specialized production, brought not only changes in social perception toward textile manufacture, tumbling from an elite and exclusively female occupation to specialist crafters, but also an alteration to its signifying roles (Gleba, 2012a: 237). The declining power of the military aristocracy saw social, political, and economic power transferred to mercantile elements of society, and large urban centres began to be able to afford to have specialists focus not only on luxurious and ceremonial textiles, but also on subsistence goods, and goods such as utilitarian fabrics, sails, and even books (Gleba, 2013: 808). Thus, textiles and textile production became an enterprise on a much larger scale, moving beyond merely demonstrating the capacity to produce highly complex and labour-consuming luxury textiles, which required highly specialised materials and skills only available to the elite classes of Etruscan society, and toward demonstrating familial command of its larger trade and production (Gleba, 2012a: 237). Textiles helped the Etruscan aristocracy assert themselves in leadership roles by display of conspicuous consumption, and by dressing proceedings and interactions with the pomp indicative of wealth and status (Sannibale, 2013: 99).

Textiles remained valuable as indicators of wealth, skill, and/or status well into the Archaic and later periods (Gleba, 2012a: 237). Textile trade and production was more and more controlled by powerful and wealthy families, and its quantity, persistently exceeding simple subsistence production, indicates its importance, wide significance, and value (Gleba, 2012a: 237). This quantity is well demonstrated by the substantial deposition of textiles in burials (Gleba, 2013b: 2) such as at Verucchio (see von Eles, 2002) and later at sanctuaries (Gleba, 2013b: 2). For example, funerary urns were dressed in textiles fastened with fibulae (see von Eles, 2006: 73), and in the absence of surviving textiles the fibulae found positioned around urns, such as at Tarquinia, may indicate the prior presence of cloth, which they had fastened (Gleba, 2012a: 232; also see Trucco, 2006: 98-99). These textiles have been interpreted as clothing for the urns, and thus representing the deceased (see Bonfante, 2003: 106), which demonstrates the intimately personifying significance of textiles, and their capability to non-verbally communicate. Furthermore, certain metal objects, such as knives, weapons, strygils, spits and mirrors, were intentionally wrapped or enclosed in protective fabric (Gleba, 2012a: 232; also Lenticchia, 1921: 34). Crucially, textiles helped to facilitate the commerce that brought Etruria into a network of Mediterranean cultural relationships, and they too enhanced the prowess of elite display amidst such relationships (see Camporeale, 2016: 68).

Tarquinia was entrenched amidst the developing cultural and socio-political backdrop of Etruria from the 8th – 3rd/2nd centuries BC - aptly reflected by its textile-production, and the progressively intensified utilization of its textiles (Gleba, 2012a: 237). Textiles were a key good that became an indispensible part of the elements defining and legitimizing Etruscan aristocrats at home and abroad (Gleba, 2013b: 2). Such growing mobility in the Early Iron Age across the Mediterranean set in motion 'material and nonmaterial transformations which affected the socio-political relations of communities' (Riva, 2010: 177) – such as Tarquinia - by stimulating access to and exploitation of luxury and prestige objects imported from the eastern Mediterranean and the Near East (Riva, 2005: 210). This so-called 'Orientalising period' (see Riva & Vella, 2006), based on the widespread circulation of goods such as textiles, as well as enamel vases, silver pitchers, bronze candelabras, bronze bowls, statuettes, cups in precious metals, and ivory (see Camporeale, 2016: 75), was a time of complex state formation, in which the hierarchical culture of later Archaic and Classical Etruria became more or less firmly established (Izzet, 2007a: 116).

Wealth and ostentation were crucial to Archaic and Classical Etruscan culture, as highlighted by burials endowed with spectacular luxury (Leighton, 2004: 59). Such burials attest to rapid economic growth, social transformation (Leighton, 2004: 59), and the establishment of a trend of exploitation and commercialisation of local resources, and readiness to invest profit in the acquisition of exotic goods (Camporeale, 2016: 74). For example, in the burial of women of rank,

together with jewels and precious vases, are also spindle-whorls for the processing of wool, but reproduced in precious materials (Sannibale, 2013: 104). Thus, exotic material culture structured and transmitted the socio-political relations of communities such as Tarquinia by serving as a centre for particular discourses of power, which unfolded through cultural staples, such as funerary banqueting and drinking, that were collective rituals for the elite, and public events for the community at large (Riva, 2010: 177). Elite gift-exchange, around which commercial and diplomatic relations revolved, alliances and decisions developed, and bonds of reciprocity, competition, and challenge were created (Sannibale, 2013: 99), undoubtedly also harboured less tangible values linked to the specific individuals and ideas within which the traded goods circulated (see Sannibale, 2013: 106). For example, the specialization of crafting roles, the logistics of export and import, the urban experience, the organisation of public and private space, and land management, are multifaceted preambles underlying the reception of elite gifts, which infuse the goods with varying degrees of time, energy, and emotion (see Sannibale, 2013: 107).

The Etruscan social, political, and economic landscape was dramatically impacted through the emergence of urban centres, such as Tarquinia (Neil, 2016: 15; see Stoddart, 2016; also Riva, 2016). Socio-politically Tarquinia was defined by burial ritual, which was a key focus for the expression of political authority by its elite groups (Riva, 2010: 9). Tombs monumentalised burial and advertised the incalculable capital derived from elite accessibility to the wider Mediterranean world amidst complex spectacles of funerary deposition (Riva, 2010: 9). Such monumentality shaped socio-political order and institutions by establishing a funerary ideology linking the tomb to the house, the family group, and to landownership (Riva, 2010: 10). The funerary landscape transformed the physical landscape of the city into a political one (Riva, 2010: 178). Tombs placed around the settlement and along strategic routes ensured the political control of the city, but also broadened the articulation of its political authority (Riva, 2010: 178). The arrangement of smaller tumuli around the larger tumuli also reflects a social system based on hierarchies and dependencies (Sannibale, 2013: 115).

Yet, territorial expansion, hierarchical social control, foreign competitors, the increasingly high stakes of trade in valuable luxuries, and burgeoning social inequalities must have sparked rivalry and conflict (see Leighton, 2004: 58). The 4th century BC onwards was typified by tensions between Etruscan, Roman, Latin, and Campanian neighbours, internal political dissension and external threats (Leighton, 2004: 138). Etruscan interests in the Adriatic were undermined by the rise of Syracuse, and the underlying pattern of growing rivalry and periodic confrontation between Etruria and Rome continued to the point of eventual Etruscan submission (Leighton, 2004: 137). Conflict undoubtedly disrupted the wider regional economy and trade, promoted growing insecurity, undermined the social system through a weakening of the bonds between aristocratic families and cities, eroded ideological and cultural values, and caused a loss of cohe-

sion, credibility and prestige amongst the traditional governing class (Leighton, 2004: 143). Tarquinia's cultural historical, social, political, and economic setting and background, therefore, is laden with elites choreographing their authority to varying degrees of cause and to lasting degrees of effect in their attempts to favourably situate themselves amidst new and expanding social orders (see Neil, 2016: 15).

1.1- Tarquinia, its Tombs, and Tomb Paintings

This study is required because its innovation facilitates a more nuanced comprehension of painted Tarquinian dress and tomb painting, but also because it enhances the examination and utilization of dress in the ancient world. The manner of dressing, or, in certain cases, of not dressing, adds another dimension to the study of Etruria, Tarquinia, Tarquinian tombs, and Tarquinian tomb painting (see Roth, 2013: 188). Such painted tombs not only provide significant insight into Etruscan culture, but they also reflect the changing historical, economic and social structures of Tarquinia (Steingraber, 2013: 655). They allude to the city's grandeur, social importance, spirituality, elite ideology and identity (Steingraber, 2009: 68), and its development as a self-willed centre of power, creativity, taste and peculiar character (Bonfante, 2005: 153; and Leighton, 2004: 100). Tarquinia's *Monterozzi* necropolis is the single largest continuous zone of tombs in Etruria (Bradford, 1957: 131) and is a testament to the urban growth, continuity, and prosperity of the city (Leighton, 2004: 88). Rock-cut tracks and subsidiary paths wind through a labyrinth of tumuli throughout the *Monterozzi* necropolis, which created obligatory access routes flanked by grand mausoleums that served to display and remind of the venerable ancestry and prestige of Tarquinia and its ruling class (Leighton, 2004: 88). This is a form of display that unmistakably demonstrated a great deal of invested financial resources, and architectural, technical and artistic know-how (Steingraber, 2013: 655), especially in comparison to the trench and shaft graves between the mounds of earth and rubble, and it afforded significant and prominent pomp and circumstance to funerary processions (Leighton, 2004: 88).

Tarquinian tombs were fully underground, dug directly out of the bedrock, and reached through a sloping or stepped dromos (see Ridgway, 2000: 301), and their floors were also sometimes plastered, and defects in the walls made good with clay and stone chippings (Leighton, 2004: 102). The *Monterozzi* necropolis boasts 80% of all Etruscan painted chamber tombs (Gianni et al, 2013: 445). Initially, the paint was mixed with water and applied directly to the bare walls, which had been given a smooth finish (Sodo et al, 2008: 1035). Later, the walls, not usually the ceilings, were prepared with a thin application of clay mixed with the local powdered rock and covered by a lime-plaster skim-coat (Sodo et al, 2008: 1036). Only on contact with damp plaster did the paint acquire the healthy glow typical of fresco paintings (Leighton, 2004: 104). The range of paint used included black, brown, red, yellow, white, blue, green, and intermediate

shades achieved by mixing (Sodo et al, 2008: 1037). The limestone held the colours of the painted tombs well, and they remain vibrant and colourful attestations to the skill and struggle of their painters (Leighton, 2004: 104). Painters who made do with lamps, tapers, or a torch to produce lighting that was uneven and flickering, who struggled with the less than ideal quality of the various wall surfaces, and who suffered long hours in the humid atmosphere of the tomb (Nagy, 2013: 1017). Command and display of such expenditure, effort, and labour is a reminder that painted Tarquinian tombs are not representative of the economic, political, and societal means available to the majority of the city's total population (Izzet, 2007: 46). Tombs – particularly painted tombs - are devices of self-representation utilized by a small and wealthy sector of Tarquinian society with the sufficient social, political, and economic capital to create and utilize such funerary monuments (see Izzet, 2007: 46).

Burial is a significant arena for the expression, representation, and idealization of the deceased and for those burying him or her (Izzet, 2007: 46). The predeceased and the buriers carefully selected the objects chosen for funerary deposition, and the tombs constructed for burial and ritual, to construct deliberately crafted self-images (Renfrew, 1985: 12) that reinforce the roles and rules which make up society (Morris, 1992: 3). For example, such funerary behaviour could strengthen or weaken relationships of power, affection, deference, rights, and duty (Morris, 1992: 3). Therefore, by prominently resonating lived experience funerary activity was an opportunity to challenge, modify, or reaffirm socio-political norms and idealizations (Izzet, 2007: 47). Thereby, Tarquinian tombs, and their paintings, were meant to be seen and to act as long-term investments, expressions of confidence, ambition, and commitment (Leighton, 2004: 86). Earlier grand 'princely tombs' – the circular pyramids - were overt statements of status characteristic of the mid/late 7th century BC, which projected power by their sheer ostentation, and by asserting the capabilities of a select few to command labour in pursuit of their own glorification (Leighton, 2004: 66). They were designed not only to dominate the surrounding terrain and lesser burials, but to promote status through ancestry, and to serve aristocratic dynasties (Leighton, 2004: 65). Rather than representing the affluent successors of a Villanovan elite, or Etruscan aristocrats, later 6th/5th century BC tumuli were smaller, more standardised, and never held such lavish riches (Leighton, 2004: 88). However, they continued to represent the elite, an oligarchy likely constrained by new codes of civic behaviour regulating funerals, which diverted their capital to other forms of socio-political display such as sanctuaries or large building projects (Leighton, 2004: 88).

Tombs are utilized to communicate pride, belief, familial distinction and longevity, as well as social, political, and economic status (Haynes, 2000: 72). Yet, given that they are sealed after the deposition of a body the applicability of the concept of 'a viewer' for such burial contexts is complex (see Izzet, 2007: 40). Multiple scenarios provide for the potential audience for a tomb

(see Izzet, 2007: 40): (1) participants in the burial ritual and mourners present at the funeral would experience the tomb; (2) Etruscan tombs usually contain multiple burials so individual members of the burying group would re-enter the tomb for subsequent burials; (3) excarnation was practiced by some Etruscans, so that, even in the case of a single deposition, the tomb would be revisited on several occasions for different stages of the burial process (see Swaddling & Prag, 2002); and (4) the individuals involved in the construction of the tomb, and passers-by during construction, would share their experience, and their knowledge of viewing the tomb (Izzet, 2007: 41). Furthermore, commemorative ritual activities likely took place with some regularity in or near the tomb (Izzet, 2007: 41). Also, the roads from the city into the territory passed through the cemetery, so that anyone entering or leaving the city would have to walk through the deliberately sculpted funerary and architectural landscape (Izzet, 2007: 41). This would include visitors from other Etruscan cities, and from other parts of the Mediterranean (Izzet, 2007: 41). The work of Elsner (1995), Osborne (1994), Mirzoeff (2010), Gell (1998), and contributors to Banks and Morphy (1997), show that despite varying viewer characteristics the underlying principles of such given visual systems operate for all viewers as a part of a general social network of which the audience forms a key part (Izzet, 2007: 40; see Meskell, 1999). Therefore, renewed memory of the tomb by encountering it day-to-day, and collective memory of its construction, interior, and utilization - thereby reinforcing its families' prestigious political, social, and economic identity – would have been unavoidable for most of Tarquinian society (Izzet, 2007: 41).

Tombs at Tarquinia acted as crucial mechanisms of societal display that went beyond the immediate theatre of funeral and burial (see Barker & Rasmussen, 2000: 123). Their audience was subject to an elite material culture and monumentality drawn from a language of display styled to promote and sustain political, economic, and social identities (see Lee, 2015: 25). They provided an unequalled opportunity for the ruling class to reinforce and maintain its superior position by means of a permanent architectural monument (Barker & Rasmussen, 2000: 123). Therefore, Tarquinian tombs mediated identity via conspicuously displaying the material credentials that indicate membership to an exclusively elite club (Leighton, 2004: 66). Similarly, dress and textiles further shaped and conditioned a tomb's non-verbal communication of status, rank, privilege, and other components of social, political and economic life. Tomb's undoubtedly exhibited expensive embellishments, such as drapery or fine textiles, like those depicted hanging from the wall in the frescoes of the *Tomb of the Tapestry* (see Leighton, 2004: 100), to accentuate their non-verbal cues by lavishly adorning such sacred spaces, and by luxuriously bedecking ceremonial dancers, priests, family members, servants, and the deceased (see Schneider, 2006: 205). Thus, Tarquinian tombs can be defined as cultural artefacts that participated in social life to the same extent as their human actors (see Dobres, 2000; or Knappett, 2005) by materially articulating the power that unwaveringly sustained Etruscan elites (see Riva, 2006).

The role of dress, which derives its mechanisms of display from similar social, political, and economic functions underlying Tarquinian tombs, in delineating various identities, such as social, political, and economic status, gender, occupation, marriage status, ethnicity, or age, through analyses of artistic representation, has been studied with increasing sensitivity (see Fisher & Loren, 2003; Joyce, 2005; Green, 2007; Bonfante, 1981; Edmondson & Keith, 2008; German, 2005; and Castor, 2010: 162). Dress is eminently malleable and theorists such as Simmel (1997), Barthes (1983), Lipovetsky (2002) and Wilson (1985) have suggested links between dress and society, class, gender, urban culture and politics (Hansen, 2004: 373). It is a well-established tool from which to study history (see Clark & Paulicelli, 2009: 4), and an ideal medium to enhance the study of Tarquinian tombs and tomb painting given the significant socio-political context, and life, of their painted dress. Tarquinian tomb paintings depict the necessary structuralist and semiotic relationships, embedded within the social action, cognition, contextualization, and symbolization typical of artistic representations, to speak of dress, and thus facilitate its more effective use as an investigative tool in the ancient world (see Tilley, 2006: 7). Much like the tomb acted as a focus for socio-political action (Riva, 2010: 9), so too does dress act as a significant structure for the articulation of social, political, and economic relations.

1.2 – Interweaving Dress, Language, and Tomb Painting

1.2.1 - The Significance and Applicability of Dress

The study of ancient dress has previously been avoided because of its feminine associations (Lee, 2015: 19). It was considered of interest to women only, and unworthy of serious scholarly attention (Lee, 2015: 19). Early feminist scholars rejected dress as a subject because of such feminine connotations (Lee, 2015: 19). The use of dress as a covering or as a surface led to its intrinsically superficial characterization (Miller, 2005a: 3) and evaluation as a topic of little import for understanding the ancient world (Lee, 2015: 19). This characterization and evaluation is tied up within a very specific Western idea of being, in which the real person is deep inside, while the surface is a slight transient aspect that is shallow, more contrived, somehow less real, and certainly less important (Miller, 1994: 71). The denigration of dress is also linked to a denigration of its stereotypical 21st century audience, often seen as women, or blacks or any other group traditionally regarded as more superficial and less deep (Miller, 2005a: 3). Yet, clothing has an indisputable and intimate relationship to persons, not just in their appearance and social identities, but even their gestures and smell (Keane, 2005: 183; Stallybrass, 1996). Dress conducts and connects, rather than separates, our sense of what lies within and without (Thrift, 2005: 246). Its dichotomy between the inner and outer self prompts realization of the almost universal relevancy, utility, and potential of dress (Miller, 2005a: 2). The signifying capability of dress amongst and between different historical contexts highlights its position as a versatile

mean and mode of non-verbal communication, which is given shape by its cultural codifications from particular places, spaces, and periods. Thereby, ethnography provides valuable, albeit not directly comparable, sources of example, which demonstrate the usefulness of dress as an investigative tool, and its worthiness of examination in the ancient world.

Forms and meanings of modern or historical dress are defined by a multitude of interrelated factors, such as fashion, aesthetics, social affiliations, ethnicity, gender and status, economics, trade and manufacture (Cleland et al, 2007: viii). Ancient art, literature, and archaeology leave no doubt that ancient dress also possessed significant forms and meanings, albeit defined in different ways, but by many of the same factors (Cleland et al, 2007: viii). For example, the successful Native American women adopting distinctive components of dress in 17th century colonial Andes (Presta, 2010), the South African chief in his European style Leopard skin suit (Comaroff, 1996), William Holman Hunt 'going native' to demonstrate his cultural authority (Codell, 2012), Russian Caucasian veterans retaining their cherkesska, burka and papakha uniform (Mamedov, 2008: 283), and Victorian women using 'their well corseted body to give impressions of gentility' (Summers, 2001: 15) demonstrate dresses ability to mark status. Elegantly dressed and bejewelled 'high status' women appear too throughout 6th – 3rd/2nd century BC tomb painting (de Grummond, 2014: 414). Their 'high status look' changed from *tutulus* and pointed shoes (550 BC), to wearing their hair bound up by a snood with a diadem or wreath (450 BC), to featuring an abundance of jewellery (350 BC), such as necklaces with large and clunky pendants or fine matched beads, earrings of a disc or grape cluster shape, diadems, bracelets, and armlets with bullae (de Grummond, 2014: 414). Slaves and servants, such as the short haired young blonde girl wearing a gold earring and a closely fitting gold necklace in the *Tomb of the Shields*, or the nude servant wearing a bulla armband in the *Tomb of the Orcus II*, also sartorially represent the status of the family they serve (Castor, 2016: 281).

Dress has historically been utilized as a visual marker (Fair, 2001: 43). It can indicate class aspirations, ethnic identity, loyalty, personal preferences, status, ethnicity, societal change, morality, gender and religion (Boswell, 2006: 445). It is not just that dress signals social position and aspirations, but it provides a symbolic code, a means of social communication indicative of both individual and societal aspects, a language that shapes societal interactions (Boswell, 2006: 445). It is also indicative of economic development by dictating who can access the 'self enhancement' opportunities that dress affords (Schneider, 2006: 203). Dress matches ones office and constitutes an identity marker of self-representation that is readily recognized, thus expressing the social rank and status of the wearer (Presta, 2010: 50). For example, gloves, in all of their varieties, were an indispensible part of public dress for the upper and middle classes of Edwardian society (Vincent, 2012: 193). They were not fashionable but a necessity, which could tell more about a woman than several months of ordinary intercourse (Vincent, 2012: 194). Gloves

signalled propriety and self worth, finishing off the sartorial armour donned for Edwardian social engagements (Vincent, 2012: 193). Livy and Dionysius of Halicarnassus recounted Etruscan preference for such conspicuous display in their account of a failed assassination attempt, which was foiled by virtue of an Etruscan scribe wearing a purple garment that was nearly identical to the dress of his king (Becker, 2016: 298). The assassins' misapprehension of Etruscan dress is portrayed as a mistake that any contemporary Roman might well have made (Colonna, 1976: 190).

Dress stands on the watershed of the past and the future and, as a result, conveys, at least while it is at its height, a stronger sense of its present than most other phenomena (Simmel, 2003: 238). Changes in 'fashion' always reflect large-scale social and cultural changes throughout a society (Strauss & Lynch, 2007: 12). For example, clothes came to be and were perceived as being the outward symbols for many of the changes in post-war Italy (Cullen, 2013: 34). Clothing was a visible and public statement, from the bikini to the notorious mini-skirt, of changing moral, gender and social values (Cullen, 2013: 35). Such clothing was seen by the more traditionally minded as a particularly conspicuous sign of the ways in which Italian society was, in their view, deteriorating (Cullen, 2013: 36). Pope Benedict XV had in his 1921 *Sacra Propediem* already spoken out against what he saw as a gathering tide of immodest fashions (Martin, 1980). Societal wide changes reflected in dress are also evident in the transformation of Edwardian gloves to a fashion piece from a necessity (Vincent, 2012), in the consumption of second hand clothes reflecting Jordan's changing economic fortunes (Na'amneh, 2012), in articulating the displacement of an ethnic population (Dankowska, 1996), and in the removal of Native American dress restrictions (Presta, 2010). Dress is one of the prime indicators of change, a very particular, often confrontational, immediately visible mode of socio-communication marking differential cultural practices.

'Clothing makes the man' (Block, 1985: 1) is suggestive of the many instances of class and status connotation interwoven throughout dress. However, there is more to consider. For example, the Victorian corset's importance lay not only in articulating a class based identity and subjectivity, but also in the construction of a certain type of female body and projection of a specific femininity (Kaiser, 1990; Summers, 2001: 12). Women's dress was often a public and moral concern, rather than a matter of personal choice (Cullen, 2013: 32). For example, un-corseted women were considered loose and immoral (Roberts, 1977: 565). A wide range of dress has focused on the correct shaping of the female body so that it is both experienced and presented as appropriately feminine (Tsaousi & Brewis, 2013: 4). The heavy, constricting, and complex clothing worn by Victorian women not only identified them as inactive, frivolous, and submissive, but also created these attributes, while men's clothing allowed them to be serious, active and aggres-

sive (Connerton, 1989: 33). The formal qualities of these forms of dress created the response in the person wearing it, which simultaneously projected this identity to others (Sofaer, 2007: 4).

The corset was also a piece of underwear employed strategically by women, often used to artificially improve their 'natural gifts' (Steele, 1985; also Tsaousi & Brewis, 2013). It also had real material consequences for the female body, as it caused a weakening of the muscles and sometimes-fatal illnesses (Summers, 2001: 17). The corset's symbolic meanings reflect Victorian understandings of the female condition as one of submissiveness and pain (Roberts, 1977: 560). The 'Mother Hubbard' gown worn by 19th century American women as everyday attire conversely offered a loose alternative to the tightness and restrictions of 'fashionable' dress (Gray, 2014: 29). Its properties reveal the tension between fashion and function, formality and informality, which marked women's dress in the last quarter of the 19th century (Gray, 2014: 29). The garment impelled women to repudiate the boundaries of its traditional use through its functional suitability (Gray, 2014: 29). Furthermore, the physical analysis of the Mill Creek shoe assemblage reveals the physical health, well-being, socio-economic status, age and gender of their former wearers (White, 2009: 141). Shoes bear the marks of walking, running, carrying, working and other activities undertaken by their owner (White, 2009: 141). Their form supplies an insight into visual appearance, fashion, and identity construction (White, 2009: 143). People, as it turns out, are quite literally imprinted into their shoes (White, 2009: 142). They are highly personalized objects that convey a wide range of aspects of individuality and activity over a set period of time (White, 2009: 141).

Furthermore ethnicity has also been associated with extrinsic traits, that is to say traits that are visible reflections of individual environment, including name, pronunciation, residential patterns and dress (Forney & Rabolt, 1986: 1). Six early painted Tarquinian tombs have been determined to portray people with what appear to be characteristically northern European features (see Briggs, 2002: 163). People who are not depicted with the dark brown or black hair expected amongst indigenous Mediterranean populations, but instead are of a distinctly lighter skin pigment with straw-blonde or red hair (Briggs, 2002: 163)[1]. Extrinsic traits provide a sense of continuity as expressions of ethnic identity (Forney & Rabolt, 1986: 2) as seen amidst elements of female jewellery in 9th – 7th century BC Latium and Southern Etruria (see Iaia, 2007). Thus, the wearing or owning of dress can too be a manifestation of ethnic identity (Forney & Rabolt, 1986: 3). Jacobsen and Gates found an association between Norwegian-American ethnicity and ownership of ethnic dress (1979), similarly so too did Baskauskas, when examining Lithuanian-American identity (1977), and Gayne, when studying the relationship between Jewish identities and wearing particular styles of religious garb (see Forney & Rabolt, 1986: 1). Ancient Greek

[1] See the *Tomb of the Baron*, *Tomb of the Juggler*, *Tomb of Hunting and Fishing*, *Tomb of the Mouse*, *Tomb of the Bulls*, and *Tomb of the Lionesses*.

veiling practices have also been analysed in the context of the Muslim hijab (Llewellyn-Jones, 2003).

Observing Black, Mexican, Puerto Rican, and Italian males, Suttles (1986) also found consistent dress and personal grooming differences that communicated the intensity of their ethnicity. Amongst the displaced Ukrainian peoples in Poland their traditional folk textiles were important symbols of both their national and cultural identity (Dankawska, 1996: 3). Dress can tell ethnicity, nationality, status, class, societal change, morality, gender and religion. It is the window through which we can perceive a substantial proportion of the unique components that construct identity. However, dress cannot convey a wearer's ideas about their life; neither can it convey their thoughts nor their beliefs about their body, mind and soul (White, 2009: 158). Therefore, cultural contextualization is essential to account for this layered variability (Tuckett, 2009: 140). Only through the study of 'context' is clothing and textile culture effectively linked to people and their development (Richardson, 2004: 6). Hence, the study of dress and art are entwined as both offer contextualized non-verbal languages and social experience (Ribeiro, 1998: 321). 'The clothed figure looks more persuasive and comprehensive in art than in reality' (Hollander, 1978: 454) and images of humanity are largely clothed images; even with a nude figure there is the implied presence of clothing (Ribeiro, 1998: 321).

Cloth intensifies sociality in rituals of birth, initiation and curing, 'it swaddles the new-born, wraps and heals the sick, embraces and unites the bride and groom, encloses the wedding bed, and in the end, enshrouds the dead' (Fox, 1977: 97). The capacity of cloth and dress to enhance who we are and deepen our social relationships is especially evident in ethnographies of mortuary rituals, in which the living wrap their dead for burial, reburial or cremation in textiles believed to ensure their continuance as social beings (Schneider, 2006: 204). Cloth and dress perpetuate the 'social skin' more than any other 'grave good', (Turner, 1993: 15), as they are coverings that, by virtue of physical proximity to the body, articulate self with the 'other' (Schneider, 2006: 204). The idea of cloth constituting a continuing link is so compelling that the dead are understood to demand it on pain of sorcery or possession (Darish, 1989; Feeley-Harnik, 1989). Textiles received as gifts are kept and stored, the clothes of deceased loved ones elicit intense affects and feelings of connection, ceremonial robes add substance to the wearer, uniforms denote the 'good' and the 'bad', those who can help from those who can hinder; 'spirituality' is woven within the very fabric of dress's materiality (Schneider, 2006: 204). Dress stores up the wearer in magical ways (Schneider, 2006: 205) through gaining sentiment from accumulated social and physical use, that is, from their worn surfaces, altered shapes, odours, materials, and associated people, spaces, and places. It fixes certain meanings by acting as a mechanism that shapes and structures a tangible sense of social reality (Grosz, 1994: 18). Dress as non-verbal communication (Roach & Eicher, 1979: 8 - 10) manipulates the surface of the body to transmit

information of many kinds, such as connotations of ritual, fertility, and eroticism (see O'Hanlon, 1989; or Coward, 1984).

Dress is not simply a repository for cultural information (Meskell, 1999: 34). Cloth and dress are 'spiritually' imbued materials as reinforced by ethnographic descriptions of artisans performing rituals, and observing particular taboos, in the case of spinning, weaving, embroidering, dyeing and finishing their product (Schneider, 2006: 205). This is a process significant enough to be worthy of immortalization upon the bronze pendant depicting Etruscan women busily cleaning, carding, spinning, and weaving textiles (Bonfante, 1978: 16). As material culture, dress is not simply reflecting given aspects of the self but, through its particular material propensities, is co-constitutive of less tangible, 'spiritual', facets, such as identity, sexuality and social role (Woodward, 2005: 21). The wearing and artistic display of striking and colourful dress is embedded within complex social practices involving body gestures and the negotiation of meaning between the viewer and the viewed (Stevens, 2007). Dress tricks and manipulates the senses of the viewer, while the deliberate illusionary qualities of its imagery plays with the fluidity of the wearers' identity, scripting a public playing-out of shifting identities (Stevens, 2007). This material and immaterial world of cloth and dress offers a vital interpretive resource, and understanding the processes that lie behind the use and effect of these objects, and systematically engaging with their art, is necessary to develop new interpretations of the past (Sofaer, 2007: 8). The comprehension of dress is connected to wider understandings of materiality, and the relationship between surface, or the aesthetic, and the personhood (Woodward, 2005: 22).

Dress creates self-images, which are crucial in the creation and reception of a social identity (see Izzet, 2007: 49). Dress can deliver impressions of modernity or of tradition, forge class aspirations and political identities, turn savages into gentlemen, the serious minded into fools, and artists into impresarios (see Sofaer, 2007: 2). This changing of a person or group from one kind into another implies that the line between subject and dress is blurred (see Sofaer, 2007: 2). It is not that dress stands metaphorically for something else, but that it is seen *as* the person or the identity (see Sofaer, 2007: 2). The art of dress is a creative act, not just in the sense of creating material culture but also in bringing about – materialising – identities (which need not necessarily be those of the author); their art makes them 'real' (see Sofaer, 2007: 3). This bringing of identities into being makes dress a powerful media for social action and shared public understandings (see Sofaer, 2007: 3). Dress literally becomes a 'prosthetic extension' of the person (see Gosden, 2001: 164). It creates socially informed bodies, which are subject to the structuring action of social determinisms (Bourdieu, 1977: 124) that shape identity via comparison and negotiation with signals dependant on societal ideals and expectations (see Wiessner, 1989: 57). Thereby dress not only transforms the body and its surroundings according to its given materiality, place, space, and cultural context (Schneider, 2006: 203), but it also gauges social compe-

tence by demonstrating an individual's ability to successfully simulate, emulate, or differentiate from within the multi-dimensional parameters surrounding their sets of socially acceptable and unacceptable sartorial choices (see Wiessner, 1990: 107). The manipulation of dress affords insight into a versatile tool of societal signification, be it indicative of prestige, be it to display social hierarchies or to reaffirm the respect of others, be it to hide, to attract, to repel, to disguise, or to signal identification with particular values or lifestyles (see Harlow & Nosch, 2014: 13), dress has a well-demonstrated and wide-ranging chronological applicability (see Lee, 2015: 4).

1.2.2 – Etruscan Language of Dress

Greek dress is visible within representations of 'fashion' throughout Etruria, even more so as the Etruscans continued to participate within the emerging orientalising world (Bonfante, 2003: 82). Etruscan 'fashion' contains various features characteristically labelled as Greek – these can be seen in hats and hairstyles, the perizoma of the men, and the long straight chiton of the women (Bonfante, 2003: 83). Although, Bonfante notes a number of Greek 'costumes' were never 'adopted' in Etruria (Bonfante, 2003: 83). There are no Etruscan depictions of the short chiton, the etagenperucke, the polos or the short Doric Cretan capelet (Bonfante, 2003: 83). The connections with Laconian and Ionian art are also particularly striking, with a surge of Laconian influence detectable around the middle of the 6th century BC (Bonfante, 2003: 85). There are, for example, also strong similarities in Etruria with figures from the Artemis Orthia sanctuary in Laconia, such as the gesture of grasping back locks of hair, and the three-quarter-length chiton (Bonfante, 2003: 85). Such cross-cultural consumption is a process of formulating material significance, which occurs within a complex and nuanced interplay of personal agency (Weiss, 2005: 47). Hence, Etruscan use of foreign objects was programmatic and informed (Gunter, 2016: 344), and reflects the deliberate choice of a 'package of alien iconographies' that were appropriate to their cultural concerns (Tuck, 2012: 45-46).

Therefore, it is perhaps less than 'remarkable' that the 'costume' of the Laconian (or Tarentine) *Vix statuette* coincides with what was considered high 'fashion' for women in Etruria around 550 – 540 BC (Bonfante, 2003: 86). The mantle worn over the head, the chiton with back folds, and the pointed shoes are illustrated in Laconian vases and Etruscan monuments from around the latter period (Bonfante, 2003: 85). Incidentally the calcei repandi also seem to be the equivalent of the later Attic shoes called laconieae (Bonfante, 2003: 86). Sicilian and south Italian monuments of around 530 – 520 BC also show remarkable similarities to Etruscan art and 'costume' (Bonfante, 2003: 86). A metope from Selinus shows Europa wearing a Cretan capelet very much like the one on a Chuisi relief (Bonfante, 2003: 86). The seated terracotta cult statue of Zeus from Paestum wears a long white chiton, purple mantle, and traces of purple shoes, and fragments of riders illustrate high boots similar to Etruscan laced calcei repondi (Bonfante, 2003:

86). Dress similarities can also be seen between Etruria and Cyprus, such as the mantle worn back to front, the conical hat and the specially fitted perizoma (Bonfante, 2003: 86).

Cross-cultural consumption of dress (Howes, 1996: 2) served as a means to create an Etruscan identity and distinction, as the consumed dress is viewed as a signal informing others of who the consumer is, or is not, and thus this practice constantly produces and reproduces images, experiences, identities and meanings (Na'amneh & Husbon, 2012: 612). Manipulation, re-appropriation and reinterpretation of objects, places, goods and spaces have reinvigorated the often neglected research into dress (Presta, 2010: 42). The consumed commodity plays a crucial role in defining the consumer (Na'amneh & Hisbon, 2012: 614), thus dress-consumption studies by Comaroff (1996: 19-38), Becker (2010), Johnson (2009) and Mamedov, (2008) have proven particularly innovative and illuminating in re-tailoring the past. 'Consumption is a tricky concept to define', it always involves more than the consumer merely obtaining and using goods (Clarke, 2003: 1). Accordingly, some scholars have become more diffident about aesthetic judgments, while accepting that Etruscan tomb painting adopts certain techniques and conventions of Greek and Near Eastern art (Leighton, 2004: 113). Yet, thoughts such as those of Bandinelli, who asserted that 'without the influence of Hellenism Italic sculpture would never have developed beyond the colourful figurines of a Neapolitan crèche' (1973: 215), epitomise the typical characterisation of Etruscan forms merely imitating culturally 'superior' Greek forms (Izzet, 2007: 211). These thoughts remain too dismissive of local agency and creativity, and fail to consider processes of cross-cultural consumption, which acknowledge culturally constructed natures (Izzet, 2007: 16). The relationship between Etruscan and Greek art (including its painted dress) is not 'parasitic in spirit and iconography' (Oleson, 1975: 190).

Cross-cultural consumption as a site and process of meaning making for wearers is widespread throughout theoretical dress literature (Hansen, 2004: 369). As a material part of culture, dress affords sets of markers that structure perception and facilitates social interaction (see Howes, 1996: 2). People make sense of their own place within the world through these consumer practices (Na'amneh & Husbon, 2012: 609). We infer what people are like based on the clothes they wear, the car they drive, or the manner in which they furnish their home (Howes, 1996: 3). We construct ourselves, at least in part, via how we dress (Tsaousi & Brewis, 2013: 3). Consumers are active social agents who adopt both uses and meanings of material culture according to their own desires, knowledge and interests (Na'amneh & Husbon, 2012: 610). The clothes we buy and wear are thus expressions of our identity (Tsaousi & Brewis, 2013: 3). Therefore, Etruscan dress cannot be explained in terms of a natural evolution towards more sensible forms, or in terms of the importation of superior models (Izzet, 2007: 209). Instead, there is an increased concern with surface as a means of expressing difference (Izzet, 2007: 209). The outer, visible surface of the body, the object, the tomb, the temple, the house and the city was critical for the

expression of difference and identity in late 6th century BC Etruscan material culture (Izzet, 2007: 209). This treatment of surface places emphasis upon the visual aspects, the formal qualities, of an object or thing, conforming to the well-established importance of viewing as a process that transforms the viewer, and emphasising the ability of dress to alter an individual's perceptions (Elsner, 1995). Thus, an emphasis was placed upon visual aspects of dress, as while cultural differences have to be comprehensible to 'insiders' or cultural participants, it is also important for successful non-verbal communication that they are understood by non-participants, strangers (Izzet, 2007: 209).

Villanovan geometric decoration had a striking capacity for subtle variation and elaboration, but 'outsiders' would be unable to sufficiently understand its message or ideals (Leighton, 2005: 367). Therefore, foreign models were adopted and manipulated because they re-expressed concepts already represented in many Villanovan period tomb groups, changing the means and modes of their expression to successfully communicate a cultural variation and identity to a wider Mediterranean based audience (Tuck, 1994: 617). Thus, an examination from the perspective of surface complicates the relationship between Greek and Etruscan archaeology more than the simplistic models of Greek superiority permit (Izzet, 2007: 211). Consumption inevitably draws from perception and experience, or expectations of societal structures, which implicate dress as a vehicle for culturally specific expression. Individuals might have been Hellenophiles in their aesthetic tastes, and in their adherence to fashions and customs associated with an elite lifestyle, but their choices invite a plethora of interpretation (Leighton, 2004: 113). They were not one-dimensional pantheists (see Lawrence, 1932), and foreign influences do not mask a locally based reality aspiring to comprehensibly communicate via the reproduction and arrangement of familiar forms and structures based on specific, recurrent and developing repertoires of visual imagery (see Leighton, 2004: 100 & 122).

Cultural borrowing, or consumption, is to be expected in the processes of consuming and developing dress – just as English loans words from Russian, German, Polish and Portuguese – so too did the Etruscan language of dress incorporate foreign *words* into its vernacular. Loaned-words used in modern English – ballet, sketch, hex, fresco, icon, have French, Dutch, German, Italian and Russian sources of origin – yet these words are still a part of the English language; they are recognized and understood, and they are significant to their English audience. It is pointless to develop and use a language that would not be understood by its intended audience (see Izzet, 2007; Gosden & Marshall, 1999; Leighton, 2005). Thus, Etruscan dress was used to effectively articulate and express difference and identity (see Izzet, 2007: 209). It is not that they wanted to be Greek, or to mimic Greek culture; it was that they desired to be definitively and unambiguously Etruscan. The influence of Greek dress and art on Etruscan dress and painted

dress is undeniable[2], and it is possible to repeatedly confirm Greek inspirations throughout painted Etruscan dress, but ultimately these merely supplement fundamental Etruscan practices, without completely transforming them into mere copies (Nagy, 2013: 1017; Krauskopf, 2006: 66). The artistic traditions may have been Greek, but the end result was definitively Etruscan (Holloway, 1965: 341). 'While the influence of Greek art on Etruscan painting is undeniable, there is a great deal both about their style and their themes which strikes us as properly Etruscan, and, to that measure, not Greek' (Brendel & Ridgway, 1995: 34). Thus, a balanced perspective of local creativity and Greek influence is required (Oleson, 1975: 189).

New data and theoretical approaches have also led to a re-assessment of the supposedly dominant role of the Greeks in Etruria (Izzet, 2007: 215). The traditional image of innate, unchallenged, and prominent Greek cultural superiority (see Blakeway, 1932-33; Boardman, 1978 & 1999; and Woodhead, 1962) has been supplanted with a model proposing a more diverse and heterogeneous network of contacts throughout the ancient Mediterranean (Izzet, 2007: 216). Such re-framing of similarities in style and iconography, for example, acknowledges a wider-ranging Etruscan agency, reception, and adaptation of foreign cultures, rather than a deficit or limitation of local creativity (see Bell & Carpino, 2016). Greek culture now takes its place as one of many equal ancient Mediterranean partners trading and exchanging with Etruria (Izzet, 2007: 216). Not only does this redress the imbalance of earlier studies of Etruscan-Greek contact, restoring Etruscan agency to processes of interaction, but it also emphasises the extensive networks of multiple interactions, on different scales, and in different directions within the Mediterranean, which Etruscan culture was enmeshed (Izzet, 2007: 222). This reassessment forms part of the wider reconsideration of Mediterranean contact (see Gras, 1985; Horden & Purcell, 2000; and Kristiansen, 1998) whereby smaller entities interacting in a more symmetrical manner have replaced the concept of a single dominant power (Izzet, 2007: 219). Furthermore, the eclectic influences that formed the Etruscan cultural repertoire also now sufficiently includes and acknowledges their interactions with their intra-regional trading partners of the Italian peninsula (see in Hall, 2004). For example, significant and formative interactions within Italy include Umbria, Samnium, Latium, and Rome (Izzet, 2007: 226). Exploiting such relationships Etruscan elites traded, adapted, and adopted drinking equipment, weapons, metal-ware, and pottery, amongst other less tangible cultural products, which facilitated development of – and reaffirmed - a uniquely Etruscan identity (see Izzet, 2007: 230).

Etruscan elites promoted themselves by creatively utilizing archetypal mediums in the visual *lingua franca* of aristocratic display (Leighton, 2004: 66). Their need to so creatively define and express boundaries results in a picture of interaction that emphasises self-definition when con-

[2] Nagy cites Spivey, 1997: 104; Steingraber, 2006; Haynes, 2000: 225 and Pieraccini, 2011: 65 - who suggested that in addition to Greek influence, one city may have inspired another artistically.

fronted with increased and diverse cultural contact (Izzet, 2007: 211). For example, they consumed Nuragic buttons, pins, pendants, small bronzes, daggers, swords, axes, ceramic vases, and metal vessels (Schiavo & Milletti, 2013: 222). Furthermore, they consumed Phoenician objects of the most refined workmanship, executed in materials of great value, such as ivory and precious metals, which played a part in shaping not only the language of Etruscan art, but also their ideological forms of displaying power (D'Oriano & Sanciu, 2013: 235). Moreover, Etruscan mound burials have many original features, but owe their fundamental genesis to North Syrian, Cypriot, and Lydian influences (Leighton, 2004: 66; and Naso, 1996). Additionally, Etruscan cross-cultural consumption can be linked to Corsica (Milletti, 2013), the Near Eastern Kingdoms (see Aubet & Barthelemy, 2000), Sicily and the Greek colonial world (see Camporeale, 2016: 74-75), Iberia, Gaul, the Punic network of North Africa (see Gran-Aymerichm 2013), and the cultures of northern Europe (see Haussler, 2007). Sardinia served as a valuable source of metals (Ridgway, 1995: 80), and the North Syrians and Phoenicians imparted significant cultural influence as carriers of objects from the East, and of styles that were incorporated into Etruscan forms (see Serra Ridgway, 2002). Less hellenocentric and homogeneous perspectives (Izzet, 2007: 222) stress that Etruria was an active participant amidst a complex Mediterranean world in which the volume of traffic and contact between cultures was unprecedented (Izzet, 2007: 230). Etruscan culture assimilated a wide variety of material and immaterial components in the face of such contact, and this adoption and adaptation of elements from other cultures served to define their own place within that world (Izzet, 2007: 230). Their material culture responded with agency to create as well as to bridge cultural difference (Izzet, 2007a: 126).

The language and modes of expression inherent throughout Etruscan dress did not develop in a vacuum, but in an environment where trade, art and crafts thrived in a climate of economic growth, cross-cultural interaction, and relative stability (Leighton, 2004: 124). This inevitably resulted in the creation of new cultural forms and systems through interaction and conjunction (Izzet, 2007: 214) that extended beyond the cultural influences of the Greek world. As such, Tarquinian painted dress is a product of a meaningfully constructed, complicated and negotiated Etruscan environment (Izzet, 2001: 186), whereby its 'elites' draw from multiple cross-cultural influences (see Sannibale, 2013). It is counter-productive and harmful to suggest that the Etruscans merely borrowed techniques of dress, representation, elite symbols, and decorative motifs in a more or less haphazard, even uncomprehending manner (Leighton, 2004: 116). This view is too dismissive and contradicted by details such as local dress, or the overt statements about social life, including bloody sports and the – by Greek standards – unorthodox prominence of women in certain social situations (Leighton, 2004: 116).

It is as the material part of culture that goods, including dress, afford sets of markers which both structure perception and facilitate social interaction (Howes, 1996: 2). As such an Etruscan

consumer is an active social agent who adopts both uses and meanings of material culture according to his or her own desires, knowledge and interests (Na'amneh & Husbon, 2012: 610). Thus, why read Etruscan dress as if it were written in Greek? It was not written in Greek, it was written in Etruscan. Furthermore, tomb paintings and their dress have little in common with mainstream Greek funerary traditions (Leighton, 2004: 113), and archaeological evidence confirms Etruscan textile craftsmanship was different to that of Greek textile craft traditions (Barber, 1991: 194). Yet, the key commonly cited 'other' for Etruria, which ignores concepts of mutual self definition and equal participation in the face of increasingly diverse contact, is a homogenous 'Greece' that was apparently the most influential external stimulator of Etruria's cultural change and development (see Izzet, 2007: 211).

Historically, discussion of Greek influence over Etruria has been varied and inconsistent. For example, Etruscan goldsmiths apparently did not merely follow Greek models, but were capable of innovative and independent work (Richter, 1918: 289). Both in their necklaces and in their earrings they evolved a number of original designs (Richter, 1918: 289). While not as 'graceful and refined' as contemporary Greek work, these designs were supposedly rich and effective (Richter, 1918: 289). Yet, discussion has also commented that while the goldsmiths of Etruria employed similar techniques to their Greek contemporaries their work had a particularly barbaric flavour (Oliver, 1966: 280). Furthermore, discourse has noted that by the 6th and 5th centuries BC Etruscan jewellery supposedly became increasingly influenced by Greek motifs (Oliver, 1966: 280). However, debate has also insisted on the local character of most, if not all, of the orientalising gold 'costume' jewellery of Etruria (Culican, 1971: 9). Themes such as the dish palmette, inverted palmette, Hathoric head and lion combat apparently indicate a mixture of external influences that stimulated the development of *local* character (Culican, 1971: 5). This commentary also asserts that the orientalising jewellery style of the rich tombs, such as those of Palestnna and Caere, are closer to Phoenician models employing more clearly recognisable Phoenician themes (Culican, 1971: 5). Recent dialogue has re-engaged the horseshoe earring as a native type in Late Classical and Early Hellenistic Etruria (Castor, 2010: 160). More than marking the inclusion of women in communal rituals, and reinforcing their social status, the horseshoe earring apparently signifies wearers as Etruscan, since no other Italic or Mediterranean culture wore this type of jewellery as part of their dress (Castor, 2010: 160).

1.2.3 – Etruscan Dress

Dress is a system of signs acting as a means of non-verbal communication (see Barthes, 1973) situated upon a body in a particular social context (Roach & Eicher, 1979). It establishes identities and attributes identities to others with varying degrees of accuracy, and takes priority over verbal discourse by setting the stage for verbal communication (Eicher & Roach-Higgins, 1992: 7). Although notoriously unwieldy, Barthes attempt to decipher the messages of dress from the

pages of French fashion magazines (1973) emphasized its function as a flexibly structured semiotic system (Lee, 2015: 24). The possible meanings communicated by types of dress are seemingly endless, but the objectively discernible types of dress, and their properties, combined within a particular cultural context (Eicher & Roach-Higgins, 1992: 4) lend it quantifiably.

Dress is not a language in the strict sense proposed by Barthes (1973), but it is a medium for communication serving multiple functions. 'No symbolic code can fully explain everything about the self' (Kapur, 2009: 106), but as a coherent system of nonverbal communication (Lee, 2015: 1) dress demonstrates what types, and which of their combinations, were socially important, and prominent (Gosden, 2001: 166). It has an innate hierarchy, which means such structures are not arbitrarily 'forced' by statistical processes (see Wendrich, 2013: 88) onto its typology, but rather its hierarchy is instead identified. Yet, current studies of Etruscan dress neglect such demonstration by ignoring applicable structuring statistical processes, and theories of bodily interaction, activity or inactivity, value perspective and communication, distinct and mundane dress, boundaries, layered interpretation/reception, cross-cultural consumption, and implications of space and place. Thus, ignored too is the exploitable potential of painted dress. The marginalization of Etruscan dress within the discipline of classical archaeology and Etruscology necessitates an incorporation of the more nuanced theoretical literature on dress that has developed outside the field of classics in the broader field of dress studies (see Lee, 2015: 18).

The perspectives afforded by artistic representations of dress valuably augment the *technical* evidence provided by textile studies (see Hollander, 1978: 450). *Technical* study of remnant garments reveal where it was made, how it was worn, and give an insight into its social life through the existence of visible alterations (Tuckett, 2009: 141), but artistic representations can readily identify why it was worn or under what circumstances (Tuckett, 2009: 140). Artistic representation of dress is crucial, as it presents the whole picture of clothed humanity (Ribeiro, 1998: 320). The details of the clothes themselves, how they *work* on the body, and what they signify with regard not just to sex, age, and class, but also to status and cultural aspirations, are depicted within art (Ribeiro, 1998: 320). Therefore, the focus on preserved textiles and tools, which provides invaluable economic, social and religious insight into Etruscan dress (see Gleba, 2013: 798), can be innovatively supplemented thorough a quantitative analysis of artistic representation, which can too be placed alongside that of the systematically and *technically* analysed archaeological material (see Ribeiro, 1998: 316 – 317). Yet, the haphazard state of English language Etruscan dress scholarship – particularly study of artistic representation of Etruscan dress - reflects its out-dated modes of study. This scholarship has evolved in disparate fashion by specialists in Greek literature, philology, archaeology, and art history, without a coherent theoretical framework (see Lee, 2015: 18) or consistent utilization of material (Lee, 2015 attempts to address these problems amongst Greek dress studies). For example, the standard de-

scriptive approach toward Etruscan dress states the basic contrasts between Greek and Etruscan dress (Bonfante, 2003: 91):

i. Greek patterns are simple while Etruscan patterns are complicated
ii. Greek garments are commonly based on a rectangular pattern while the Etruscans used a variety of forms – such as polygonal, rounded, elliptical or cross shaped, often with separate pieces or curved edges
iii. Greek textiles tended to be thin and soft in contrast to their Etruscan counterparts
iv. Greek garments were woven in one piece while Etruscan clothes were often made up of separate parts and were fitted, sewn and stitched together
v. Etruscan dress was more receptive to foreign influences than earlier Greek dress had been – a Greek would never wear barbarian dress
vi. Normal Greek dress was plain while Etruscan costume tended to be more luxurious. Etruscans always made more use of ornamental garments and complicated accessories – shoes, hats, belts, and jewellery
vii. The Etruscans tended to wear more clothes than the Greeks

It also states the Etruscan elements of 'fashion' included in later Roman costume (Bonfante, 2003: 93):

i. Complicated patterns with separate pieces or rounded edges
ii. A preference for heavier woollen textiles
iii. A preference for fitted models made of separate pieces sewn together
iv. Receptivity to new fashions and a practical approach to dressing for warmth
v. A preference for clothes more luxuriously decorated than equivalent Greek garments
vi. A tendency to wear more clothes than the Greeks, to cover their bodies more completely, to wear a greater number of accessories; mantles, chitons, shoes, hats, jewellery etc.

Additionally, the mantles and tunic-shaped garments found at Verucchio have been determined as distinguishing ceremonial garments. Their tablet woven borders are status markers, not only by their presence, but also by their width bearing significance (Gleba, 2013: 806). The ubiquity of borders in Etruscan garment representation was not a purely decorative measure (Gleba, 2013: 806). Rather these borders communicated messages of status, not only to the Etruscan population but also to other early Iron Age cultures (Gleba, 2013: 806). Tablet woven borders are also found on textiles from the princely burials in Central and Western Europe (Gleba, 2013: 806). Moreover the toga, the Roman descendant of the Verucchio mantles, retained the border as a distinguishing symbol of status (Gleba, 2013: 806). The private luxury conveyed through

their dress seemingly confirms Etruscan wealth and prosperity (Bonfante, 2003: 88-89). The generally more colourful and complicated nature of Etruscan clothes, compared to those of contemporary Greeks, arises from within their supposed inclination toward luxury, wealth and life (Bonfante, 2003: 93), which errs uncomfortably close to out-dated *Orientalism* (Said, 1978). Etruscan use of mantles, hats, and covering in general contrasts the Greek simplicity of clothing and heroic nudity.

Male Etruscan figures dress in rounded tebenna and calcei repandi, dancers in a light short mantle, ladies wear tutulus and pointed shoes and, following the beginning of the 5th century, youths wear a longer rounded mantle draped back to front with a wide sweep in front (Bonfante, 2003: 87). One marked feature of Etruscan 'fashion' is that women in the archaic period wore clothes that were elsewhere reserved for men; clothes such as the toga/tebenna, the three-quarter length chiton, short hair and the laced calcei repandi (Bonfante, 2003: 88). Most likely this is more a question of practicality, as dainty slippers and sandals, as well as shorter garments, are impractical in the colder climate of Etruria (Bonfante, 2003: 88). The weather also accounts for the warmer clothes of so-called Etruscan 'costume', such as the popularity of thick plaid fabrics, of heavy woollen mantles, of sturdy calcei repandi, of the variety of hats, and of long sleeves (Bonfante, 2003: 88). Yet, dress is more than a describable accoutrement. It plays a key role in the blurring of subject and object (see Foxhall, 2012: 184). It is an 'embedded object' with the power to create ties even in the absence of face-to-face relationship (see Foxhall, 2012: 186). It has its own structure, which transcends any particular historical moment (see Pinney, 2005: 265 – 268) and inevitably accrues additional layers of entanglement amidst human relation and memory (see Foxhall, 2012: 185; also Pinney, 2005). Akin to loom weights (Foxhall, 2012: 199 – 205), textile production and trade (Gleba, 2013b; also Foxhall, 2012), and remnant textiles (Gleba, 2008), studies of painted Etruscan dress must break convention to similarly expose its storied, complex and dynamic relationships (see Foxhall, 2012: 206). Focus must be placed on its entangled relationships as an analytical entity (Foxhall, 2012: 186).

Missing amidst its description is the agency of Etruscan dress and its role in constituting and forming lives, cosmologies, reasons, causes and effects (Miller, 2005a: 2). Contemporary dress theory now considers the material reality of the garments as integral to its definition, discussion, and use (Vincent, 2012: 190). As a blending of emotional, mental, and practical appraisal rooted in specific cultural contexts (Kapur, 2009: 101) the study of dress has been subjected to radical changes, primarily rethinking the relationship between its forms and contexts (Miller, 2005a: 5). To go beyond Bonfante's focus on origins, descriptions, typologies, and functions, this study utilizes the redefined term of *dress*. The redefinition labels dress 'an assemblage of modifications of the body and/or supplements to the body' (Eicher & Roach-Higgins, 1992: 1). More specifically 'the dressed person is a gestalt that includes body, all direct modifications to the

body itself, and all three-dimensional supplements added to it' (Eicher & Roach-Higgins, 1992: 1). Dress so defined includes a long list of possible direct modifications of the body, such as coiffed hair, coloured skin, pierced ears, and scented breath, as well as an equally long list of garments, jewellery, accessories, and other categories of items added to the body as supplements (Eicher & Roach-Higgins, 1992: 1). It too is unambiguous, free of personal or social valuing or bias, usable in descriptions across cultural boundaries, and inclusive of all phenomena that can be accurately designated as dress (Eicher & Roach-Higgins, 1992: 1). Other terms do not identify all possible modifications and supplements to the body that the term dress includes (Eicher & Roach-Higgins, 1992: 3). Labels such as appearance, adornment, ornament, clothing, apparel, costume, and fashion, although frequently used interchangeably, are inaccurate and misleading (Eicher & Roach-Higgins, 1992: 3).

Etruscan horseshoe earrings appear in burials as gifts supplied for the dead and as a part of a tomb's painted decoration (Castor, 2010: 160). To call the horseshoe earring by the moniker *appearance* privileges its visual aspects and to call it an *ornament* or *adornment* imposes value judgements regarding its aesthetic (Lee, 2015: 21). To call it *clothing* or *apparel* excludes it as a modification to the body, and to call it *costume*, which more properly refers to dress worn in theatrical or ceremonial contexts, suggests it is something other than everyday dress (Lee, 2015: 21). To call it *fashion* is imprecise, since it also applies to other aspects of culture, and it is also overly specific, since it does not include 'unfashionable' dress (Lee, 2015: 21). These terms are not as accurate or as comprehensively encompassing as *dress*, which has been determined the most useful of the technical terms concerned with the social aspects of dress (Eicher & Roach-Higgins, 1992: 3). The term dress is used to indicate the total repertoire of body modifications and supplements that a particular social group makes available to its members, but also to indicate a particular display of body modifications and supplements that a specific individual assembles from an available repertoire for a particular time and place (Eicher & Roach-Higgins, 1992: 2).

The neglect of contemporary dress literature and painted dress throughout Etruscan studies is epitomized by the statement that 'it is hard to separate the history of the actual costume from that of its artistic representation (Bonfante, 2003: 88). Not only is it 'hard' to achieve such a feat, it is unnecessary. Although Etruscan artists were fond of using realistic details in a decorative manner, telling us a great deal about the practical construction of Etruscan clothes from their representation in art (Bonfante, 2003: 22), it is not required that such painted dress is 'real' or 'realistic' to be significant. There might be no hint of the intricate filigree and granulation found on surviving Etruscan disk earrings in the painted versions (Castor, 2016: 278), but this too is irrelevant. It is tied-up amidst the neglect and failure to appreciate processes of cross-cultural consumption and artistic materiality. Yes, Etruscan art responds to the imagery of Greek, eastern Mediterranean, and Egyptian art in a myriad of ways (Castor, 2016: 278), but

regardless it remains an Etruscan product. 'Irregularity and uniqueness' is readily apparent in their imagery alongside a distinctive approach to the human figure (Brendel & Ridgway, 1995: 105). Etruscan artists focused a great deal of attention on renderings of the human body, bodies which portrayed, in the majority, men and women rather than deities or figures of heroic origin (Carpino, 2013: 1007). Tarquinian tomb painting and its dress are not just static and fixed – they are fluid, and repositories for human intelligence, emotion and action (Mitchell, 2005: 37). They present not just a surface but also a product, which is produced and understood in terms of human experience (Mitchell, 2005: 46). They are marked with sartorial difference, and function as a 'go between' in the social field of human visuality (Mitchell, 2005: 46).

Missing from painted Etruscan dress studies is the specificity afforded by the theoretical literature on dress developed outside of classics, and thus far applied inconsistently amidst Etruscology (see Lee, 2015: 18). Beyond the descriptive statements and general inferences of age and sex (see Brons, 2012: 58-62) it is inappropriately presumptuous to typify a wholly Etruscan form of dress, and not regional or local (Tarquinian?) dress, styles, fashions, and costumes, as broad Etruscan forms of dress are unlikely in lieu of narrower variations. Tarquinian painted dress has only been partially utilized by prior studies (see Bonfante, 2003; Brons, 2012; & Castor, 2010), and there has been no attempt to engage it as a coherent system of non-verbal communication. It consistently plays a secondary role and has not been 'read' or examined according to its own depicted structures, forms, and merits. It is frequently used to support the arbitrary aims of individual studies exploring identity (Brons, 2012), status (Castor, 2010), gender, death and the afterlife (Bonfante, 2009; & 2009a), ethnicity (de Grummond, 2014), mythology (Scheffer, 1991), or the identification of couples, divinities, ancestors, and mourners (Bonfante, 2003: 213). These studies do not situate painted dress amongst its embedded system of non-verbal communication, but instead it is displaced to suit their particular needs of analysis. This selective and displaced utilization alongside other forms of archaeological and textual material disregards the communicative capacities of painted dress. It needs to play more than a supporting ancillary role, as 'the artist-craftsmen carefully depicted the dress of an Etruscan aristocrat, entertainer, priest, divinity, mythological figure, or mourner' (Bonfante, 2003: 222) and such deliberately depicted sartorial structures present a reasoned significance. Furthermore, divorcing painted dress from its given structures produces erroneous manufactured amalgamations. The unabashed plucking of painted dress from their paintings draws them from their *coding community* and into an agenda; this places painted dress outside of its formulated structures and weakens its validity.

1.2.4 – Utilizing Painted Tarquinian Dress

The study of dress in art is one of the essential approaches to history (Ribeiro, 1998: 315). Artists are informed by knowledge of dress, whether consciously or unconsciously applied to their

work (see Newton, 1953). Their paintings are a point out of which other contexts, be they social, cultural, or political, can be developed (Newton, 1953). Paintings depict many of the decorative ornaments, such as floral garlands, shells, stones, brightly woven strips of cloth, grass, and grains, amidst other *things* indicating various social affiliations, marital status, amuletic powers, festival dress, etc. that do not survive in the archaeological record (Castor, 2016: 286). Artistic representations might include depictions of dress that were never worn in Etruria, and they can also depict dress drawn according to a stylised rendering (Bonfante, 1971: 278). Many items of clothing not actually worn in Etruria are what Bonfante labels 'special costumes', like the Phrygian hat, the calcei repandi, and the animal-skin mantle or loincloth, which were commonly identified with mythological figures (Bonfante, 1971: 278). She argues that some of these garments were originally worn; later, no longer in daily use, they nevertheless continued to be represented in special cases, as archaic artistic survivals (Bonfante, 1971: 278). However, it is their laboriously intentional depiction within the structures of Tarquinian tomb painting that is significant. A painting is a material object that has been marked with colours and shapes, and it demands agency (Mitchell, 2005: 45). Etruscan dress studies fail to acknowledge this painted agency, and that the colours and shapes of painted dress have been particularly arranged according to significant and quantifiable structures amidst a discrete assemblage.

Painted dress has particular properties (see Miller & Tilley, 1996) and ought to be investigated in its own right (see Meskell, 2005: 2). Its study needs to incorporate the empirical trends of object analysis, such as form and material, but also engage its social relations, focusing on its meaning, practices and histories, including its relationships between sociality, temporality, spatiality, and materiality (Meskell, 2005: 2). Such acknowledgements move study beyond the simplistic readings of dress as either purely functional or deeply symbolic (Meskell, 2005: 2). It too permits painted dress to be used as an effective tool to grasp the religious and ritualistic language of the painted tombs (see Leighton, 2004: 102), as it articulates deliberate and culturally specific manipulation. Closely examining painted Tarquinian dress encourages serious and detailed analysis of its formal qualities, and identifies the ways in which such qualities elucidate a uniquely interconnected and structured system of non-verbal communication (see Gosden, 2001: 165).

Painted dress's qualities are derived from their material counterparts, as they too are a part of the same non-verbal visual system of communication. Painted dress possesses structural similarities to material dress as the material resources and knowledge drawn upon in the creation of tomb paintings are not meaningless, produced, and selected within a cultural void (see Sorensen, 1997: 101). It is reasonable to assume that much of the painted evidence for dress relates to the appearance of the living, even if conceptually they have been transformed (Sorensen, 1997: 102). Painted dress is composed of different types, and it is the individual types, as well as their combination, which provide quantifiable linguistic forms (Sorensen, 1997: 93). The individual

types constitute the 'language' of painted dress and their combination constitutes the 'speech' (see Sorensen, 1997: 93). This structure provokes consideration of the complexity of personal and group identities, and the diversity of forms of expression, including class, political identity, sexuality, occupation, ethnicity, gender and combinations of such categories (Sofaer, 2007: 4).

Castor (2010: 163) grapples with the dialectical relationship between individual display and societal expectation by examining both the cultural context and artistic assemblage in which the horseshoe earring was displayed (see Goffman, 1976: 70). She considers the messages that the earring communicated to viewers; while also considering the ways in which dress in general, and jewellery in particular, responds to social and historical circumstances to create identities (Castor, 2010: 163). The women wearing horseshoe earrings are represented in their role as a wife or are portrayed in some form of religious context (Castor, 2010: 190). The women communicate their social identity, mood, intent, expectations, and relationships to their perceivers through dress, and such advertisements are intended to elicit response (see Goffman, 1976: 72). Their identity as communicated by their dress is uniquely personal, but at the same time social because it comprises of selections from socially constructed ways of sartorially attributing identities on the basis of societal position (Eicher & Roach-Higgins, 1992: 5). Expected behaviours are associated with this position (Eicher & Roach-Higgins, 1992: 5). Therefore, horseshoe earrings (painted or otherwise) communicate identity as they announce the social positions of a wearer to both wearer and observers within a particular interaction situation (Eicher & Roach-Higgins, 1992: 5). The women follow the rules or directives learned at the behest of *others* (Eicher & Roach-Higgins, 1992: 5). The *others* review the women's sartorial communication, developed through an experience permitting predictive sartorial reactions, and pending the sartorial accuracy of the women (or in a funerary context those who chose her adornment) they are received with an expected and calculated response befitting the context of interaction (Stone, 1965: 220). If, on the contrary, the meaning signalled by their dress is different for presenter and reviewer, interaction will proceed with difficulty or be terminated (Stone, 1965: 226).

Tarquinian tomb paintings' colourful garments reflect not only changes in dress through time, but also the ability of its dress to convey individual and group identity (Gleba, 2013: 799). Textiles evidently held great social significance throughout Etruria (Gleba, 2013: 806). The title of the book on the finds at Verucchio, *Guerriero e Sacerdote,* 'Warrior and Priest', highlights that the dress of warriors could also identify them as priests, but that not all warriors were priests (Gleba, 2013: 799). Hats are a most distinctive component of a costume, as part of a uniform that marks out the individual who wears it as belonging to a particular group, and Etruscan priestly dress offers no exception to this rule (Bonfante, 2009: 186). Important ladies or 'princesses' were also dressed distinctively, particularly when destined for the grave (Gleba, 2013: 808). Upon death such 'princesses' were interred in sumptuous jewellery, and in dresses covered

with thousands of amber and glass beads, and it has been suggested that these dresses may have been their actual wedding dresses, rather than products for their final rite of passage (see Catacchio, 2007). Their 'elite' identity has also been linked to the tassels that marked the high rank of Etruscan women in the 5th and 4th centuries BC, and too to their special hairstyles (Bonfante, 2009: 189). The parallel ways of dressing frequently depicted for the couple of man and woman is also unique and layered with meaning (Bonfante, 2009: 189). Therefore, painted Tarquinian dress is significant not only because it reproduces or transforms social relations, and mediates differential interests and values, but because it provides a tool for pictorially arranging complex thought (see Tilley, 2006: 7).

Dress is first and foremost a visual medium, hence the compatibility of tomb painting for its analysis (Lee, 2015: 5). However, while ancient dress coding communities are not accessible as a check, and artists took liberties in their depictions of garments and accessories, the visual sources of dress are not 'misleading' (Lee, 2015: 5). They are perhaps 'misleading' if 'reconstructing' dress, but not so if reading the visual sources as 'things' in their own right, rather than as 'documentary evidence of actual practice' (Lee, 2015: 5). Painted dress affords painting equal rights with material culture, as it has a language of its own (see Mitchell, 2005: 47). Depictions of dress are often simplified and idealized, but their repeated patterns not only 'reflect actual features of dress', and 'ideological constructions', but also painted forms of intentional and deliberate non-verbal communication (Lee, 2015: 5). That artists were more interested in aesthetic than ethnographic depictions (Lee, 2015: 5) is beneficially exploitable toward untangling this communication. Although dress theory generally assumes a living community, and 'actual' garments, it can be applied to painted depictions of dress, facilitating the identification and investigation of its significant hitherto overlooked communicative structures (see Lee, 2015: 3).

Pictorial depictions of dress often show correspondence with the material evidence (see Schumacher-Matthaus, 1985), but it is preoccupation with the 'accurate' identification of dress types that has diverted scholarly attention away from painted dress's quantifiable structure. Arguments over typology do not advance understanding of painted garments and their socially functional structures (Lee, 2015: 3-4). Painted typologies change in such a way as to provide an indication as to what is significant or insignificant (Nagy, 2013: 1024), and differing typological combinations display the deliberate structures of painted dress. There are no 'correct' or 'incorrect' depictions of painted dress, which exposes the 'Morgan Statuette problem' (see Bonfante, 1971: 279) as indicative of the limited study of painted Etruscan dress, and the failure of this study to incorporate contemporary dress or art theory (see Miller, 2005a: 1).

Varying forms of iconography present different structures of dressing (Bonfante, 2003: 8), and so the depicted dress must be examined within its artistic context (see Gosden, 2005: 194) and

not separated into falsely dichotomous materialist and symbolic readings (see Meskell, 2005: 2; also Keane, 2003a & 2003b). Painted Tarquinian tombs provide the means through which painted dress relations are visualized, and it is in these tombs that meaning is framed through an inter-connected non-verbal sartorial communication (see Sofaer, 2007: 1). Tomb paintings are animated by exhibiting dressed bodies that speak, sometimes literally, sometimes figuratively (Berger, 1980: 3). Therefore, there is undeveloped potential in using painted Tarquinian dress as a tool by examining its role amidst its structured painted arrangements (see Castor, 2010 for example) so as to bypass the hitherto limited focus on its individual pieces, parts, and components. Artistic representations of dress are intentionally organised displays of nonverbal communication and not the unstructured, incoherent, and free-form entities implied by their labelling as 'imagined dress' (see Bonfante, 2009: 190).

Painted dress testifies to how individuals perceived their world and its inhabitants (Bonfante, 1993: 47). However, its study must transition from broad and generic discussions of their representation, and instead focus more on their inherent specificity and utility (see Brendel & Ridgway, 1995: 103). For example, typical painted dress discussion proceeds as such; a painted mantle with square corners worn by a deceased man on his journey to the underworld contrasts the rounded tebenna of his accompanying musicians (Bonfante, 2009: 188). The rectangular himation and rounded tebenna mark the boundary between the living and the dead (Bonfante, 2005: 158). Furthermore, Ionic chitons were shown with five folds, often with a pouch at the waistline; 'artistically' ladies held them up with one hand, but in reality the shorter length chiton in Etruria rendered this gesture unnecessary (Bonfante, 2003: 87). Likewise, mantles, shown according to conventions of Corinthian art in the first half of the 6th century, later followed some of the motifs of Ionian art, and eventually reflected Attic models (Bonfante, 2003: 88). Underlying the many changes and modifications that constituted a distinctive Etruscan dress was a preference for particular forms, shapes and patterns (Bonfante, 2003: 87). For example, the earlier period saw two 'fashions' for women appear, both of which are rarely or never found outside Etruria; they are the long back braid and the back mantle (Bonfante, 2003: 86 – 87). The back mantle is a 'native fashion', but the back braid can be traced to Near Eastern and Mycenaean models, but it is most visible throughout Etruria (Bonfante, 2003: 87). Further developments in artistic dress led to the adoption of 6th century BC features that combined to form a characteristic 'Etruscan look' (Bonfante, 2003: 87). This look consisted of the rounded tebenna, the short mantle draped back to front, the calcei repandi, and the women's high tutulus.

To go beyond such broad discussion and description of painted 'Etruscan dress' key theoretical and methodological components of dress, cross-cultural consumption, visual representation, and artistic contextualisation cannot be ignored. Discussion needs to acknowledge not only 'a northern or a southern fashion' (see Bonfante, 2003: 88), but also the interconnected non-verbal

communicative system of painted dress. Furthermore, painted dress cannot be thought an artistic motif rather than real dress (see Bonfante, 2003: 87). It cannot be said that perizoma is localised in northern Etruria, that archaic korai in the Ionic diagonal mantle are characteristic of southern Etruria, because the art of southern Etruscan cities is more open to Greek influence, and that it accepts Greek conventions more completely than that of the north (see Bonfante, 2003: 87). Discussion cannot say that the art and dress of northern cities is more distinctive for this reason, it is less Greek; or that this explains the persistence of the perizoma fashion and, later, it 'continues to represent the fashions of earlier times' (Bonfante, 2003: 87). It cannot say that the whole range of painted dress at any one time is not peculiar to Etruria, or that 'special garments' stand out as 'native', while others are seemingly conspicuous by their absence from the local scene (Bonfante, 2003: 87). It cannot say that the northern regions possess garments that could be labelled their 'specialities', such as the pointed hats of characters and jockeys on friezes from Poggio Civitate (Bonfante, 2003: 87). Nor can it say that individual periods such as the 7th and early 6th centuries, the end of the 6th century, and the 4th century BC demonstrate special features frequently enough to allow us to speak of a specifically 'Etruscan style' of dress (Bonfante, 2003: 87). Discussion must recognize that 'art does not merely reproduce the visible' and paintings do not replicate settled forms of dress, but forms that uniquely impact their viewers, and recall their materiality (Klee, 1961: 76), which is formative (Shiff, 2005: 757).

Many aspects of Etruscan society were mirrored through painted dress (see Gleba, 2013: 808). Dress has dualities in its very formation (Ash & Wilson, 1992: xi). It has a superficial reputation for both snobbery and sin that is emphasized by its obsession concerning outward appearance, but, it also gives a voice to the unconscious and an individual's deepest desires (Ash & Wilson, 1992: xi). Davis points to Robert Herrick's poem *Delight in Disorder*, emphasizing its suggestion that dress implies a good deal more than its surface level reveals (1994: 4) for 'a sweet disorder in the dress kindles in clothes a wantonness' (Herrick, 1891). Thus, far from playing a merely decorative role in history, dress is increasingly recognized as central to debates concerning gender, morality, and the human body, as well as cultures of consumption (Cullen, 2013: 33). Through dress the body is used to indicate age, marital status, class, ethnicity, sex and a sense of style (Boswell, 2006: 440). Dress is one of the most easily recognized cultural signs (Dankowska, 1996: 17) and it is both public and private, material and symbolic (Clark & Paulicelli, 2009: 3), it is the 'social skin' (Turner, 1993: 15), and its two sided quality explores both the individual and collective identities the dressed body enables (Hansen, 2004: 372).

1.2.5 – Re-tailoring Tarquinian Tomb Painting

More than providing a study of actinobacterial colonisation (Diaz-Herraiz et al, 2013), painting techniques (Pallecchi et al, 2009), or 3D reconstruction (Remondino et al, 2011), Tarquinian

tomb paintings are a promise of continuity (see Ljunge, 2013: 152), as their stone markings transcend time (see Klaver, 2001: 179-180). The long lasting, enduring, durable, and protected material qualities of the tomb and its paintings speak to an expectation of permanence (see Sodo et al, 2008: 1035 – 1037). The materiality of stone encourages an articulation (see Klaver, 2001: 180) that extends beyond the uncertain spatial relationships of potentially disposable or distortable material culture (see Leighton, 2004: 116). Making marks on rocks is a practice that gains meaning from this relationship with the materiality of stone (Klaver, 2001: 180). Thus, the tomb paintings of Tarquinia are of an unrivalled artistic and cultural importance (Prayon, 2000: 335), but not for their splendid colours and rich iconography (Steingraber, 2006: 35), but for their inherent structures of non-verbal communication, which were expected to survive and be 'read' for generations. Therefore, the capability to identify and examine recognizable, coherent, and significant organizational groupings of painted dress is a valuable inference of tomb paintings permanent and deliberate painted expression. The manipulation and arrangement of painted dress entails a level of non-verbal communication beyond mere 'formulas for artistic representation' (see de Grummond, 2014: 415), which makes Tarquinian tomb painting an ideal point of departure for studying a coherent system of dress that was exploited for its assumed communicative longevity.

The depictions of dress decorating Etruscan urns, sarcophagi, or the walls of tomb chambers, convey, at the very least, a part of the ideas held by the artists and their employers into a generally intelligible form understood and appreciated by 'others' (Krauskopf, 2006: 67). Thus, Tarquinian frescos are akin to a book, as they are never arbitrary, but result from deliberate choices and selections made by the craftsmen or artists in the processes of their production. They exist because they have meaning, and they occur in the forms, structures, and sequences that they do because, just like words, those forms and sequences have significance (Izzet, 2001: 185). An active process of selection, transformation and invention occurred, as such depictions had to serve the purposes of a specific cultural environment, different from that of its Greek, Phoenician and even Italic neighbours (Leighton, 2004: 113; also see Miller, 1987). The frescos had to deploy and use their own language; they had to use painted dress as a series of signifiers that point to their particular cultural signified (Saussure, 1960). This is a necessary reinterpretation and deployment given that when objects, or ideas, or thoughts, or beliefs, move from one context to another, they are transformed according to the new environment in which they are consumed due to the different social and material relationships into which they are placed and utilized (Gosden & Marshall, 1999). They now have to substantiate and afford legitimacy to these new relationships by being understood. Language is a cultural process with rules, and in order to speak and be comprehended, the tomb paintings too have to abide by the structuring rules governing dress (see Saussure, 1960).

There are varying contents, structures, meanings, beliefs, and thoughts painted onto the walls of Tarquinian chamber tombs. Funerary art encapsulates social realities, magical or religious beliefs, philosophical messages and metaphors about rites of passage to varying degrees of accuracy (Leighton, 2004: 119). Everything to do with death, burial, and the grave in general concerns complex emotional acts and customs that cannot be plainly defined (Krauskopf, 2006: 67). The crisis of death is confronted by means of personal ceremonies and forms of symbolism (Leighton, 2004: 115). These acts cannot be rationally analyzed to create monolithic, 'realistic', and logically coherent narratives (Krauskopf, 2006: 66). This is why funerary imagery functions on different levels and is viewed from different standpoints (Leighton, 2004: 119). Thereby one interpretation need not always exclude another (Leighton, 2004: 119), as is evident when comparing the various interpretations of the *Tomb of the Bulls* (see Leighton, 2004; Holloway, 1986; Oleson, 1975; and Simon, 1973). Tarquinian tomb painting's combination of naturalism, abstraction, stylization and fantasy results in their iconography containing a range of meanings, which merge reality and metaphor to form simultaneously discernible ideas (Petrarulo, 2012: 129). This is why we see 'mixed allusions' (Brendal & Ridgway, 1995: 101) and a multiplicity of associations that are not always mutually exclusive (Davies, 1985: 632). Thus, not every single picture painted on a tomb wall will fit into the framework of a logically consistent and uniform interpretation. It is not possible, nor desirable, to avoid such degrees of uncertainty (Krauskopf, 2006: 66; also Steingraber, 1986; & Elkins, 2000: 23). Yet, painted dress provides a means to navigate the tumultuous painted preferences arising from burial (see Krauskopf, 2006: 67).

A textual analogy is a most useful position to understand the significance and meaning of dress in the painted tombs of Tarquinia (see Tilley, 1991). The textual perspective considers the Tarquinian frescos as discourses that have been written through associations of dress, a language that is a tool, a resource, and a medium through which to work (see Tilley, 1991: 25). The act of speaking, writing, or painting is its own concrete material phenomenon (Saussure, 1960: 7). Language is minus speech; so painting dress articulates significant linguistic selections (see Barthes, 1973: 27). The language provides the conditions and underlying structure for speech or writing to take place, while without this speech, the language would not, and could not exist (Saussure, 1960: 7). Therefore, the tomb paintings of Tarquinia speak through their dress (see Mitchell, 2005: 48). By elucidating the forms and structures of their conversation they are made more significant (see Tilley, 1991). The situation of Etruscan art and painted dress is not unlike that of Etruscan writing: the Etruscans used the Greek alphabet to express their own, unrelated language; similarly, they adapted Greek images and iconographies to express their own, autonomous ideas, beliefs, and practices (Ridgway, 2000: 314). Just as an Etruscan text cannot be understood if assumed to be a piece of corrupt Greek or Latin, so it is impossible to grasp the sense of Etruscan images if trying to read them as corrupted 'reality' rather than accepting their own painted terms (see Ridgway, 2000: 314). This is a fundamental component of reading and

understanding any 'text', as it would be pointless to read an Italian book as if it were written in Spanish or French, or questioning if the text was 'real', so why read an Etruscan image as if it were not 'real' or 'representing' something else? The painted dress is as 'real' as any remnant textile or word on a page.

It is crucial to not confuse the desire of the painting, what it is trying to say, with the desires of the artist, the beholder or even the figures in the picture (Mitchell, 2005: 48). What pictures say is not the same as the message they communicate, or the effect they produce, both by-products of a human interpretation (Mitchell, 2005: 47). A thorough structural interrogation can untangle the languages embedded within paintings, and decipher their discourses – what they say. A painting is more than a vehicle of meaning or an instrument of power (Mitchell, 2005: 50) as it encodes names, biographies, memories, histories, and desires (see Schneider, 2006: 204). Paintings provoke aesthetic responses and also present the relationships between people and dress (see Sofaer, 2007: 2). The intersection between dress and painting offers most productive ground (Sofaer, 2007: 2). Experience does not reside in the painted dress but with the viewer, thus to gain a response the viewer's attention must be directed to the formal properties of dress, since its formal qualities affect the way in which the engagement with painted dress takes place (Sofaer, 2007: 3). The active nature of painted dress is its ability to elicit particular sensory responses from people and channel them, as the value and impact of dress comes, in part, from their sensory impact (Sofaer, 2007: 3). The response too comes from components of materiality, and the ways in which this materiality has been manipulated through painting (see Sofaer, 2007: 3). Social life is composed in large part of the links between people and 'dress', thus painted dress is a crucial means through which to investigate tomb paintings (see Gosden, 2001: 167).

Tomb paintings are a stage for projecting the complexity of identity and the ways that people chose to play with their expressions through painted dress (see Sofaer, 2007: 4). The formal properties of painted dress, much like their material counterparts, are too influenced by the genealogy of dress, including historical continuities and changes, and also its perceived source (Gosden, 2005: 193). Painted dress's forms, its historical trajectories, and its perceived sources combine to socially effect people, and it also invokes the materiality of its physical counterparts to affect people, and to shape them as social entities (see Gosden, 2005: 193). For painted dress to be powerful in a recognized manner its forms must lay down certain rules of use, rules that influence both its sensory and emotional impacts (Gosden, 2005: 193). How we think, and how we act, depend as much on the rules of dress we surround ourselves with, and encounter, as in the languages we may use, or the intentions we may have (see Tilley, 2006: 7). Therefore, it is not so much what the structures of painted dress mean as to what they do: the influence they exert on viewers (Gell, 1998). However, most Tarquinian tomb painting scholarship neglects this 'communicative' potential in favour of examining disconnected 'aesthetic' or 'magical' proper-

ties (see Pluciennik, 1994: 40), much to the detriment of the painted 'communicative' structures that more coherently yield vital cultural information (see Pellegram, 1998). Similarly to painted vase studies it is necessary to diverge from more formal visual analyses in favour of other interpretative approaches (Lee, 2015: 16).

'The back mantle is considered female due to its iconographical combination with long tunic, earrings, and the back braid' (Brons, 2012: 59; also Bonfante, 1976) is a statement resulting from a restrictive binary pattern of gender interpretation (see Brons, 2012: 60). However, beyond disguising potential gender divergences (Brons, 2012: 60) such a statement also divorces dress from its systems of non-verbal communication. Similarly, 'the act of draping the mantle over the head appears, in general, to be considered a female trait' and 'the short tunic, the diagonally draped mantle and the loin-cloth a male trait' (Brons, 2012: 59) are statements contributing only vague description, ersatz certainty, and are of little use due to isolating dress from its system of non-verbal communication. The varying forms of iconography present different structures of dressing (Bonfante, 2003: 8) and so the depicted dress must be placed into its respective artistic context (see Gosden, 2005: 194). Hence, painted Tarquinian tombs provide the means through which particular sets of painted dress relations are visualized, and it is here that meaning is framed through an inter-connected form of non-verbal communication (see Sofaer, 2007: 1). The given associations, context, and the audience for a painted representation derive its significance (see Jannot, 2009).

Without the inter-connectivity of painted dress the relations between painted tombs have little substantive reality, as there is nothing else through which these relations can be plausibly mediated (Sofaer, 2007: 2). That is not to say that the dress of cinerary urn figures, seated statuettes, or the Capestrano Warrior, for example, do not offer useful points of comparison, but that such disconnected and unrelated material cannot be used to articulate and dictate overarching modes, means, practices, and systems of dress. There are inconsistencies amidst the bold statements of Etruscan dress because different iconographical systems of dress have been incorrectly utilized as a unified point of departure. The system of dress (see Barthes, 1983) determines that what is true in one context *will not* be the same as in another context (see Brons, 2012: 59). A related assemblage of visual representations must be the starting point for investigations of dress. Dress should not be haphazardly *put together* with a disregard for how it was formed in any given context(s). For example, a loincloth is typically considered male dress, but it is also worn by female figures on bucchero figurines dated to the 7th century BC, from Tumulo di Poggio Gallinaro at Tarquinia (Brons, 2012: 65). These figurines exemplify the importance of acknowledging artistically specific sartorial expression, which is produced within and for its own particular non-verbal communicative system. Lacking appreciation for such embedded continuities, as provided

by painted dress's historical layering of relationships (see Foxhall, 2012: 186), is what frustrates Brandt's search for a 'common denominator binding the paintings together' (2015: 110).

Alongside the elegant ladies, scantily clad young women, naked youths, komasts, musicians, armed warriors, couples, and groups (Leighton, 2004: 109) there is only a tacit acknowledgement of structure amongst the disparate and disconnected Tarquinian tomb painting studies. The myriad action, drama, spectacle, dance, sports, games, finery, and generally wide representational repertoire (Leighton, 2004: 109) undoubtedly encouraged the disconnected but structurally implying methodologies (see Petrarulo, 2012; or Nagy, 2013 for example). From the boisterous knees-up of lively adolescents to the gentler gliding steps of robed matrons, and from something resembling flamenco, with castanets, clapping and flutes, animating the *Cock* tomb, to prancing figures in the *Triclinium* tomb performing an exotic mime-like dance with elaborate footwork, arm and head gestures, there are unarticulated presumptions of underlying structurally generative principles (see Leighton, 2004: 109). There is no firm unification between examinations of Tarquinian visual representation, as studies hop between painted tombs, pottery, figurines, and statuary to prove their point (see Brons, 2012: 58-62 for example). Seldom is the embedded system of non-verbal communication amongst a corpus of visual representation recognized, but often is it disregarded through selective utilization. Yet, visual representations 'offer not just a picture of the manners in which people dressed', but they also present their own nuanced system of 'social reality' (see Brons, 2012: 61). They illuminate the volatility and contestability of meaning, belief, and practicality, and the dynamic interplay of material and human agents in funerary and social discourses (Dakouri-Hild, 2008: 118). Thus, the focus on applying disconnected, contrasting, and selective *magical* and *aesthetic* investigations, rather than utilizing the overarching painted dress structures connecting the painted tombs, must be rectified.

Painted tomb's *aesthetic* and *magical* analytical *readings* are disconnected, contrasting, selective, inordinately subjective, and are too reliant on symbolic linkage and metaphor (see Leighton, 2004: 120; & Petrarulo, 2012: 128). For example, a pomegranate is said to evoke Phersipnei, as well as the netherworld and other related myths (Jannot, 2009: 81). Representations of laurel remain ambiguous despite its apollonian and purifying association having already been pointed out (see Simon, 1973). Emphasis on landscape elements, especially the fig tree in the centre of the *Tomb of the Bulls*, is hailed as the hallmark of an Etruscan hand (Nagy, 2013: 1018). Furthermore, in some tombs the painted dado of the walls is converted into a suggestion of the sea (Holloway, 1965: 344). Its top is formed into a line of stylized wave crests and painted deep blue (Holloway, 1965: 344). Leaping dolphins are also occasionally added (see Stebbins, 1929). The *Tomb of Hunting and Fishing* has also been identified as a global landscape of the Elysian Fields (see Colonna, 2003: 77). Moreover, the reoccurring door motif represents either a tomb door or alludes to another plane of existence beyond the tomb chamber (Leighton, 2004: 118). Tomb painting

also apparently expresses a deep and serene belief in the immortality of the soul, and the certainty of a salvation that is eminently personal and intimate in artistic illustration (Ridgway, 2000: 305). Painted trees, shrubs, and vegetation connote the area outside of the funeral pavilion (Holloway, 1965: 343), and provide the dead with a permanent reproduction of the temporary structure erected during the funerals for their protection and honour (Ridgway, 2000: 305). Foreshortening, shading and highlighting were also skilfully employed to populate the world of Hades (Nagy, 2013: 1022). The two demons, Charun and Vanth appear to escort and encourage the dead, or to patiently wait, but not to harm (see Ridgway, 2000: 310). *Aesthetic* and *magical* approaches are limited, and must be enhanced to accommodate the *communicative* 'mix of frivolity and solemnity, the unworldly, the distinct, and the mundane' (Leighton, 2004: 114).

The myriad paintings do not simply 'fit together' in a meaningful and significant way. There is no anchor supporting the presumed connective structure amidst and amongst the different painted Tarquinian tombs. There is no evident justification for studies to imply coherent and logically connected structures when disparate subjectivity reigns in their haphazard application of differing forms of visual analysis. The ignored overarching, coherent, and communicative structures, afforded by painted dress, provide the means to more objectively and accurately exploit an inter-connected system of non-verbal communication. Painted dress is the commonality that bridges the divide between the separate and incompatible tomb paintings. Each painted tomb pivots around a shared sartorial structure. Thereby, painted dress provides a structural equivalency across tomb painting that contrasts the previously subjective and disconnected methodologies. It utilizes the fundamental principles or the rules by which people order their lives through the ordering of their dress (see Tilley, 2006: 8). Painted dress is the predominant communicative justification for analyses encompassing the wide array of painted Tarquinian tombs. Amidst the bright colours, sense of movement, and rich iconography (Leighton, 2004: 106) it remains a singularly cohesive thread. Thus, painted dress is an objective and quantifiable baseline binding together the painted tombs dualism of reality and spirituality wrapped in their aesthetic quality and symbolic power (see Ridgway, 2000: 310). Investigating such painted dress systems prevents fanciful narrative indulgences (see Moretti, 1970) from carrying analysis away into the 'far distances of the sea' (Moretti, 1970: 155). It affords closer attention to the structuring, structured rules, and generative principles at work throughout painted Tarquinian tomb discourse (see Tilley, 2006: 8).

As a 'communicative' transforming medium (Schneider, 2006: 204) dress has its own meaning, use, and purpose according to the various worlds it simultaneously inhabits (see Morris, 1986; & Zorn, 1985). Therefore, the disconnections between the *aesthetic* and the *magical* in the tomb paintings are not so disconnected through the structures of painted dress, but are instead interconnected. Yet *readings* of the tomb paintings remain popular, and disparately prolific, with in-

terests ranging from their spiritual, religious, and social, to psychological dimensions (Leighton, 2004: 107). The social readings emphasize the status of the deceased, the evocation and celebration of elite events, and thus, transportation into a socially exclusive domain of familiarly aristocratic archetypes: wine-drinking, banquets with entertainments, sporting contests, horsemanship, hunting and allusions to the natural world (Leighton, 2004: 107). Later tomb paintings are also populated with supernatural figures, allusions to the Underworld and mythical or netherworld scenes (Leighton, 2004: 105). The spiritual, religious, and psychological readings emphasize mythology, magic, motivation and meaning (Leighton, 2004: 105). The persistent blending of reality and metaphor has produced dichotomies of variable interpretation (Petrarulo, 2012: 128). Magical or symbolic readings are in danger of wishful thinking (Leighton, 2004: 120). Aesthetic or realistic readings, on the other hand, could be accused of being too literal a reading, a reading that contributes little more than narration and description (Leighton, 2004: 120). Dress straddles and bridges such contrasting interpretations and rectifies the shortcomings of either/or approaches through its spiritual soaking up of historical and mythical associations (Schneider, 2006: 204). Therefore, dress connects people not just to this world, and to one another, but also to the immaterial world, and the world beyond the physical (Schneider, 2006: 204; also Weiner, 1985; 1989; & 1992).

Painted dress is socially central in ways that other *things* are not (Gosden, 2001: 164). It inhabits contrasting domains, and its *communicative* structure is useful in bridging the later fragmenting Tarquinian tomb paintings, especially those of the 3rd century BC, which compromises the ability of narrative driven *magical* and *aesthetic* methodologies to derive significance (see Roth, 2013: 187). Their fragmentation reflects wider changes in the ways in which Tarquinian and other Etruscan elites chose to materialize their ideologies during tumultuous cultural and political realignments (Roth, 2013: 188; also De Marrais et al, 1996). The diminishing narrative repertoire of tomb painting reduces the validity of the prevailing disparate and disconnected analyses. The reduction of the iconographical repertoire and, concomitantly, the fragmented approach to the decoration of individual burial chambers (Roth, 2013: 188), compromises the analytical efficacy of non-*communicative* approaches. The tendency towards fragmentation suggests a decreasing amount of wealth and effort expended upon painted tombs (Roth, 2013: 194). The iconographic and spatial fragmentation of the paintings reflects deliberate changes in the ways in which Tarquinian elites used tomb painting as a vehicle for non-verbal communication (Roth, 2013: 194). The structure afforded by painted dress permits a closer inspection of such statements than is provided by analyses relying on the departed wider iconographical context. Painted dress need not be positioned amidst a coherently defined painted narrative. It is enough that it is intentionally depicted and arranged to place it within the shared sartorial structures between and across painted tombs. Despite artistic fragmentation painted dress endures, and con-

tinues to produce recognizable forms and styles, which maintain a structure into which people and *things* fit (see Gosden, 2005: 194).

1.3 – Overview

The structure of this thesis presents painted Tarquinian dress as a coherent system of nonverbal communication. Its basic organizing principles are borrowed from contemporary dress theory, which views dress as a means for individuals and groups to non-verbally articulate messages (Lee, 2015: 1). Material is also arranged according to the requirements of hierarchical clustering analysis, which statistically identifies the communicative potential of painted dress. Such an approach applies a much-needed methodological framework that demonstrates the significance of dress and its capabilities to enhance investigation of the dressed ancient world. Particularly, the theoretical models provided by modern dress studies, and the practical quantifiability provided by statistical procedures, facilitate a new mode of analyzing Tarquinian tomb painting, thereby providing fresh insight into old material. The studies' primary aim is to identify and investigate the pictorial forms, language, and structures of painted Tarquinian dress, so as to re-tailor understanding of Tarquinia, its tombs, and its tomb paintings, and to stress the importance of ancient dress, expand its study, and extend its forms of analysis. The thesis reconciles the structuralist totalities of painted dress as relational structures of meaning, with an exploration of their implied materiality (Woodward, 2005: 21). Furthermore, it provides an alternative to aimlessly searching for symbolic and metaphorical homologies by subjecting paintings to unfounded, qualitative, and subjective forms of visual analyses, in misguided and unfounded attempts to reveal allusions, hidden meanings, or connections (see Leighton, 2004: 120). Analysis of painted dress is reassessed and re-situated to redress the imbalance of utility between it and its *technically* analysed material culture counterparts.

Chapter 2 explains the methodological processes used to 'dress' the tomb paintings of Tarquinia via the application of a hierarchical clustering analysis. It quantitatively implements the theoretical concept of tomb paintings as a 'text' structured through their depictions of dress. A text built by assembling a set of objects (painted scenes), which are measured for similarity by comparing their primary variable attributes (clothing and adornment types). The chapter outlines the procedures used to select, assemble, and create the objects (painted scenes). It also clarifies the typological definition of the primary variables (clothing and adornment types). It too outlines the data-entry process and the creation of a data matrix that generates binary numerical data by recording the variable types (clothing and adornment types and 'other' content types). Moreover, the details of statistically computing the similarity amongst the objects (painted scenes) and their clustering to create groupings of similarity are provided in this chapter. It explains the underpinning statistical operations of the hierarchical clustering analysis and how its behaviour

(similarity measures and clustering algorithms) arranges the objects (painted scenes) into groupings of differing similarity according to their arrangement of primary variable attributes (clothing and adornment types). Chapter 2 also describes the formatting of the numerical analyses software package used by this study (PAST) and the structural properties of its outputs (dendrograms). Additionally, it is supplemented by a glossary of key methodological terms and elucidates the statistical validation techniques used to gauge the accuracy of the clustered groupings of objects (painted scenes). Chapter 2 also explains the post-clustering interpretation process and describes the various cross-discipline frameworks deployed to examine the results (groupings of similar clothing and adornment types and 'other' content types) output by the hierarchical clustering analysis.

Chapter 3 presents the results output by applying the hierarchical clustering analysis to the clothing and adornment type and 'other' content type binary data matrix. It presents the key data from the analysis and is supplemented by appendix A, which contains the full data from the analysis as well as more detailed descriptions of the data. The chapter transcribes the raw statistical outputs (dendrograms) into their more digestible, structured, coherent, and monolith groupings (tree branches). It makes use of pictorial and tabular arrangements to clearly communicate these groupings. The groupings (tree branches) classify the different combinations, compositions, styles, and fashions of the dress depicted in the Tarquinian tomb paintings. They are the 'things' that 'go together' (see Barthes, 1983) and as a grouping they act as a locus of painted sartorial connectivity (see Clarke, 1978). The chapter also presents the outcomes of the statistical validation techniques for each entity, as well as their chronological alterations. Furthermore, it presents the key thematic trends and their painted associations, contexts, and audiences. As such it permits exploration of the results and their associated human and/or material practices (see Tilley, 2006: 10; and Garrow & Gosden, 2012: 24).

Chapter 4 and 5 interpret and identify the 6th – 5th and 4th – 3rd/2nd century BC groupings (tree branches) of painted dress output by the clustering analysis via analyzing their differing relationships between associative strength, frequency, and typology. The groupings are contextualized and investigated by applying phenomenological, structural, linguistic, and 'fashionological' (Kawamura, 2005: 1) frameworks. They avoid the limitations of prior dress studies, which by and large, examined dress as representing something else rather than something in its own right (Hansen, 2004: 369). The post-Barthesian emphasis on semiotic decoding has dominated accounts of fashion and clothing, wherein analysis and discussion centred solely upon dresses communicative capacities (Woodward, 2005: 21). The clothing in such accounts becomes a ghostly presence, coming to appear immaterial through a lack of engagement (Woodward, 2005: 21). Such approaches reduced dress to its ability to signify 'things' that seem more real, as though these 'things' exist above, or prior to their own materiality (Keane, 2005: 185). There-

fore, these chapters re-engage conceptions of materiality alongside communicability (see Hansen, 2004: 369) – much like Summers (2001), Vincent (2012), Tsaousi & Brewis (2013), Boswell (2006) or White (2009), and their preoccupation with agency, practice, performance, and the body, which considers the dressed body as both subject in, and object of, dress practice (Hansen, 2004: 369). Their myriad interpretation contrasts the earlier 'fetishism of structural and semiotic approaches' (Keane, 2005: 183). Structuralist approaches problematically position dress as a text with arbitrary signifiers, but dress is based upon assemblages; thus relations between *things* is a key interpretative focal point for chapter 4 and 5 (see Woodward, 2005: 21).

Chapter 6 concludes, but also discusses. It assesses the accuracy and success of the hypothesis, which stipulates the existence of identifiable and coherent organizational groupings of dress depicted throughout Tarquinian tomb painting. Accordingly, it grapples with the significance of identifying so clearly demarcated groupings of painted dress. It articulates the value of painted dress as a signifier of non-verbal communications. But, it also re-positions Tarquinian tomb painting as an intentional medium of communication, which re-tailors tomb painting's social, political, and economic relationships, and simultaneously develops understanding of Etruscan dress and wider Etruscan society. This final chapter also identifies dress as the key substance and mechanism of Tarquinian tomb painting by demonstrating painted dress's ability to enhance stagnant processes of visual analyses (see Miller, 2005a: 4). Furthermore, the chapter gauges the output of the statistical validation techniques, and their impact upon the theoretical and methodological concepts that generated the painted dress groupings (tree branches) and dictated their interpretation. Chapter 6 too diachronically illustrates the 6th – 5th and 4th – 3rd/2nd century BC manipulations of painted dress and their differing non-verbal priorities. The chapter also pinpoints future research directions through outlining the methodological adaptations required to similarly examine other forms of unimaginatively analyzed material culture and visual representations that depict dress.

2. Methodology

2.1 - Introduction: The Tomb Paintings as a Text Structured by Clothing and Adornment Types

Tomb paintings of Tarquinia display an extensive group of images depicting dress. They thereby provide a means from which to study the role of bodily adornment in Tarquinian society throughout the 6th — 3rd centuries BC. As previously discussed it is useful to conceptualise the clothing and adornment types in the tomb paintings of Tarquinia as a language used to write a text. If dress is a language of signs, it must have a vocabulary and a grammar, a signifier and a signified, and it must also have words and sentences, even paragraphs, and it must be spoken (Saussure, 1960; Lurie, 1981: 4). As a language or a system of signs it is made up of types, it has style, fashion, and forms that are recognisable. It is in these styles, fashions or forms that they present, as well as create, their set of meanings, more or less coherent, more or less intentional. Although, as previously discussed there are ambiguities between the desired and the actual creation and presentation of dress, which acknowledges that the language of clothing and adornment types does not always work as intended by their wearer (see Douglas & Isherwood, 1979: 5). This is a language deployed and scanned by both those who can and cannot grasp the vocabulary (Douglas & Isherwood, 1979: 5). Those who can or cannot proficiently read and deploy the groupings of types (Douglas & Isherwood, 1979: 5). By defining what is fashionable or stylish, by seeing what parts go together, it is also defined what is not stylish or what is not fashionable, by seeing which parts do not go together. This vocabulary of clothing and adornment types can be deciphered, as it is a language, it has words, and these words go together in a specific and recognisable fashion, but it needs to be translated into a more easily readable text.

Painted clothing and adornment types are not easily legible, and there are inherent methodological and theoretical challenges in using both visual and material culture to decipher its language and speech (Colburn & Heyn, 2008: 3) A considerable amount of research discusses the *language* of dress, the social importance of dress, the roles of clothing and adornment types in identity construction and societal interaction, and the purported significance of dress in particular places at specific moments in time. However, there are few (if any) studies that provide a quantifiable methodology that can be used as a practical guide for deciphering the painted language and speech of a clothing and adornment typology. This is particularly true for representations of dress depicted upon archaeological material which, as is usually the case throughout the humanities, demonstrates a tendency toward qualitative or anecdotal analytical methods when dealing with such visual imagery, rather than quantitative imaging processing methods (Elkins, 2011: 167). Visual representations of dressed individuals often serve only as a kind of check for the reconstruction of the comparatively fragmentary physical evidence (Lee, 2015: 25). Yet visual

representations are not arbitrary, but depict the forms and sequences that they do because those forms and sequences have significance (see Izzet, 2001: 185).

The method explained in this chapter acts as a cipher by using the depictions of clothing and adornment types as keys to translate, or decrypt, the tomb paintings of Tarquinia. This method focuses on the similar and dissimilar groupings of objects within the tomb paintings. It examines the relationships between the objects in these paintings, and in a shift from traditional modes of looking at and thinking about these tomb paintings, it employs a new mode of exploring and quantifying their structure via the application of a hierarchical clustering analysis, which untangles, and structures, their clothing and adornment typology. The purpose of this method is to identify significant organisational groupings amidst the Tarquinian tomb paintings utilization of painted dress. It seeks their visual arrangements to expose the social ideas, notions, identities, relationships and conceptions woven into manipulations of such painted dress. This dress communicates through its depicted groupings of different clothing and adornment types, which taken together draw from the painted Tarquinian sartorial dictionary. Methodologically speaking, it is as much about accommodating 'how' clothing and adornment types mean, as it is about discerning 'what' they mean (see Feldman, 2014: 337); understanding and statistically replicating how clothing and adornment types generate meaning and significance is key to accessing their meaning and significance.

This methodology takes its inspiration from Christopher Tilley's *Material Culture and Text: the Art of Ambiguity*, and has a similar structural organisation to his analysis of the cave art at Nämforsen (Tilley, 1991). Tilley proposed that to treat art as a text the researcher must build a text from the art, read this text, and give context to this text (Tilley, 1991). Tilley explains how to treat art as a text, how to locate a vocabulary, and uses a very similar, albeit perhaps narrower, data set to this current study. He provides useful information on diluting a painting to its smallest linguistic unit, and how to use this unit to construct and record the language within painting. Tilley gives a voice to art and describes how to listen to it through the use of structuralism and semiotics, hermeneutics and stucturalist Marxism (Tilley, 1991). His approach proves flexible and adaptable, and allows numerous questions to be asked of the data. It offers not one interpretation but many, and as discussed in the previous chapter he too combines a myriad of different theoretical positions to demonstrate the innately complex relationship between text, material culture, and visual imagery in archaeology.

Visual imagery has often been overlooked as a thing of analysis in and of itself, having commonly been treated as merely representative of ideas, or illustration of objects, or reconstruction of events (see Molyneaux, 1997: 1). Images are rarely considered as the *things* that communicate,

as the *things* that are worthy of analysis in their own right (Molyneaux, 1997: 1). The relationship between image, text and material culture, or rather in the context of this study, the relationship between tomb painting, language, and clothing and adornment type, is a core methodological concept (see Mitchell, 1994). The pictorial clothing and adornment type depicted within the Tarquinian tomb paintings provides a useful and productive point of entry into this relationship, as its structural qualities fit neatly between ideas of language and visual imagery. McCracken emphasises this structural quality by noting that dress is not 'read' in a linear fashion, like language; rather its constituent parts are comprehended simultaneously, like a work of art (1987: 120). Thus, the relationship between tomb painting, language, and clothing and adornment type necessitates a methodology capable of accommodating its scale, but also one capable of preserving and exploiting its innate structural properties.

Contrasting Tilley (1991), this study required the use of a more complex statistical approach to build, read and contextualise the *text* of clothing and adornment types in the tomb paintings of Tarquinia. This chapter outlines a clustering methodology that builds, reads, and contextualises the texts of painted dress. It makes the Tarquinian paintings *speak* via articulating what they convey through their language of dress. This process makes use of numerical procedures to divide a group of given units into homogeneous sub-groups, which allow for the visual inspection of an otherwise complex set of data-matrices (see Romesburg, 1984: 21). The use of such a statistical procedure in translating a language of signs embedded into art is not without precedent. This form of analysis has previously been performed at Nämforsen to refine the language of cave art postulated by Tilley (Forsberg, 1993). The innate relation, contrast and opposition amongst individual pieces of dress, the clothing and adornment types, are inherently suited to this application of a clustering analysis. Dress is made up of groupings of different types, thus it is susceptible to an analysis that identifies groupings of similarity. The key concept of this study is that Tarquinian tomb paintings can be read as if a text through their arrangement of clothing and adornment types. The implication is that as a text the paintings posses an underlying structure of similarity and relation, and that the clothing and adornment types are key to this structure. As such they are a way to build, read and contextualise a paintings text. The recognition and acknowledgement of underlying structural patterns of painted dress is an important classificatory component of this methodological tool.

Cluster analysis is a generic name for a wide variety of procedures used to identify classificatory groupings (Aldenderfer & Blashfield, 1984: 7). These procedures empirically form *clusters* or groupings of similar entities (Aldenderfer et al, 1984: 7). More specifically, a clustering method is a multivariate statistical procedure that starts with a data set containing information about a sample of entities, and attempts to reorganise these entities into relatively homogeneous groups

(Aldenderfer et al, 1984: 7). This method has been used archaeologically to analyse ancient coins (Reale et al, 2012), to create typologies (Whallon, 1972; Curta, 2012; Meloni et al, 1993), to classify archaeological material (Spaulding, 1953: 305), and to understand landscapes (Sayer & Wienhold, 2013 & Harrower & D'Andrea, 2014) and construction processes (Miriello et al, 2010). The relationship between archaeology and cluster analysis is most applicable (see Hodson, 1970). It is a very specific way of looking at data, and is driven by a desire to apply a rigorous 'objective analytical method' (see Voorrips, 1990). This form of analysis has also been used in image processing software such as facial or object recognition (Hoppner, 1999; Kyperountas, 2008). Therefore, it is apt to use such techniques to examine visual archaeological representations, which are usually only subject to qualitative analytical methods (see Elkins, 2011: 167). Cluster analysis, as a data exploration method, entwines well with dress theory, as both are preoccupied with groupings, classifications, combinations, and compositions of different categorical types, or the lack thereof. Cluster analysis also complements the structural precepts of language, or text, and picture, or tomb painting, theory. This statistical method bridges theory and practicality, so that it becomes possible to read Tarquinian tomb paintings through their depiction of clothing and adornment types, and their differently signifying groupings. This chapter is structured according to the *steps* required by all cluster analysis methodologies (Aldenderfer et al, 1984: 12), and is supplemented by the glossary of key methodological terms.

***St.* 2.2** - selection of a sample to be clustered

***St.* 2.3** - definition of a set of variables on which to measure the entities in the sample

***St.* 2.4** - computation of the similarities among the entities

***St.* 2.5** - use of a cluster analysis method to create groups of similar entities

***St.* 2.6** - validation of the resulting cluster solution

***St.* 2.7** - interpretation and contextualisation

The samples to be clustered are the painted tombs partitioned into individual scenes. The variables are the clothing and adornment types, and the *other* content types. The computation of similarity amongst the scenes, and the use of a cluster analysis method to create groupings of similar scenes based on their variables (the variables being the clothing and adornment types, and the *other* content types), is performed simultaneously by PAST (*Paleontological Statistics)* statistical software (see Hammer, Harper, & Ryan, 2001). The results, the dendrograms, are statistically validated to ensure they reflect actual structures within the data, and not structures imposed upon the data by the clustering process. Post-clustering interpretation and contextualisa-

tion re-situates the classificatory groupings as a series of monolithic tree branches to more clearly identify, compare, and contrast their structures. This construction of appearance, and its communication of meaning, is known to be well related (see Sorensen, 1991). Thus, the clothing and adornment type groupings elucidate the over-arching sartorial language intentionally deployed to arrange deliberate non-verbal communication. Painted dress groupings provide a vital common ground from which to garner a fuller and more accurate understanding of pictorially organised dress arrangements, which negotiate a hitherto unspoken myriad of associations that developed over space and time (Wendrich, 2013: 87). There is no such thing as a 'natural' ordering principle (see Wendrich, 2013: 88), but the painted dress groupings are testament to a worldly perspective (see Bonfante, 1993: 47), and are closest to untangling otherwise inaccessible social, political, and economic sartorially ordering structures.

2.2 - Building the Text Part. 1: Selecting a Sample to be Clustered (or Assembling a Set of Objects)

This study examines 96 of the painted Tarquinian tombs (see appendix H for tomb dating and quantity per chronological period - also appendix B and appendix F). The selection of these 96 tombs out of the approximately 200 painted tombs at Tarquinia is due to the sparse publication and limited accessibility of the remaining 104 or so tombs. Tarquinian painted tombs have not been as thoroughly published as the rock art of Nämforsen, so this study is limited in the paintings it can examine (see Hallstrom, 1960). However, the 96 tombs of this sample provide a good spread of chronological representation from the 6th through to the 3rd/2nd centuries BC. Photographs and drawings have been acquired from the two primary English publications of Tarquinian tomb paintings (Steingraber, 1986; & Steingraber, 2006). A number of images have also been used from various other sources when the prior two volumes lacked the required pictorial documentation (such as Rizzo, 1989; Naumann, 1987; Naso, 2005; & Pallottino, 1952). It should also be noted that the artistic reproductions of the tomb paintings, such as the colour drawings of Carlo Ruspi (from Horst, 1987) and James Byes (from Howard, 1842), have been consulted where available to assist with examination. The reproductions in the *Ny Carlsberg Glyptotek* have also been referenced (Moltesen & Weber-Lehmann, 1991). It was necessary to consult these colour drawings were the tomb paintings had decayed to a point of near illegibility; the reproductions were useful in conveying what they might have previously represented, and also in providing illustrative plans of the tombs layout. However, such reproductions are given to inaccurate portrayals (see Ridgway, 2000: 312). Therefore, they have been used sparingly and only when necessary, and all due consideration has been given to their evidentiary limitations.

The paintings from each of the 96 tombs are separated into individual numbered scenes (see appendix B) that form the group of objects to be clustered (see Fig. 2.1). The selection of

scenes is dictated by a logical partitioning of a painting that produces smaller and more manageable chunks, which can be clustered according to their clothing and adornment types and *other* content types. There are 394 individual scenes. The scenes improve the nuance of the study, and allow for a more detailed investigation. They are akin to individually adorned bodies, which are dressed in an intentionally particular way via their pictorially depicted clothing and adornment types. Their language of dress is open to be read, just like the clothing and adornment types worn by an individual. The scenes are used as the smallest unit of structure for the analysis[1]. The scenes that make up a single painting are compared with each other, the scenes that make up two or more paintings within a single tomb are compared, the collection of scenes that make up a tomb are compared, and perhaps most importantly, the scenes, singularly and in combination, from each tomb, are compared with those from other tombs. This partitioning of scenes from within paintings provides a greater degree of flexibility as it breaks down large, complex, and imposing images into smaller and more manageable units. Furthermore, the analysis of individual scenes within a painted tomb permits the use of poorly published painted tombs, those that have been damaged, perhaps defaced or faded, as it is not necessary to posses the complete documentation of a painted tomb for its effective utilisation.

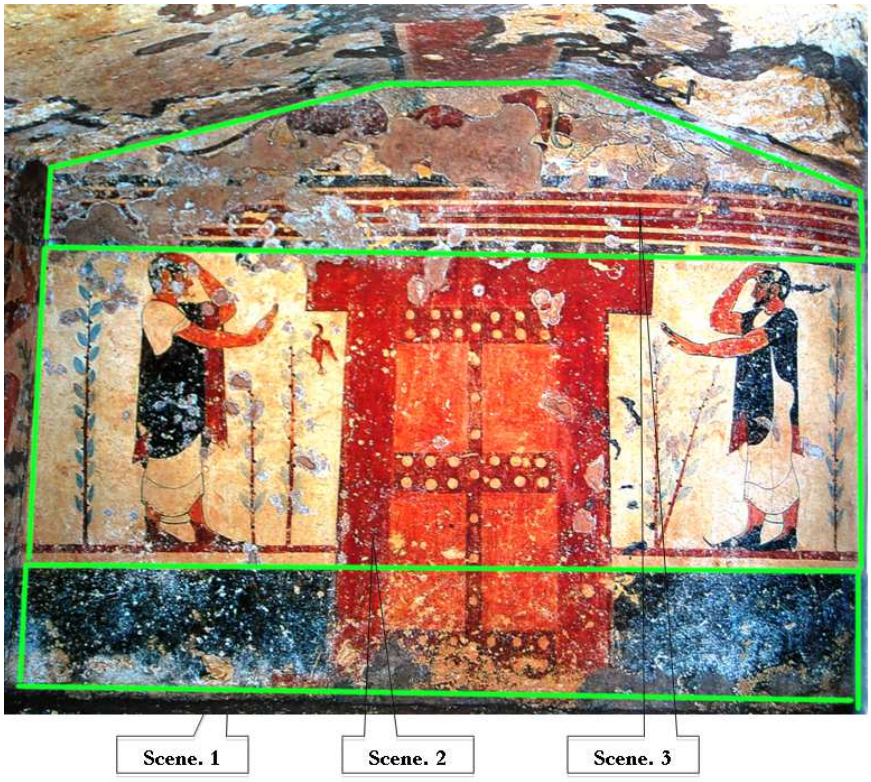


Fig. 2.1: A partitioned painting from the 520 BC *Tomb of the Augurs* selected to demonstrate *scene* demarcation.

[1] Initial attempts to use a smaller unit i.e. an individual depicted in a tomb painting, proved too problematic. There were too many individuals and the data matrix's structure quickly became unwieldy.

The scenes are primarily defined by the architectural construction of a tomb, and the placement of its paintings, as is evident from the *Tomb of the Bulls* (see Fig. 2.2). The scenes in this tomb are chosen due to their natural demarcation by the architecture. For example, the scene of Troilus on horseback confronted by Achilles in front of a fountain has a natural frame provided by the placement of the two doors on either side of the painting (see Scene. 1), and so it hangs like a 'self-contained' picture (Leighton, 2004: 106). The decoration of the frieze placed just above the two doorways also provides a natural frame for this scene. The paintings often provide the delineating elements of a scene i.e. frieze decoration, open spaces, partitioning lines, decorative patterning, or character/item blocking, etc. This interaction between tomb architecture and painting is also evident in the pediment of the *Tomb of the Bulls* (see Fig. 2.2 - Scene. 2, 3 & 4). The pediment as an architectural feature of the tomb, usually viewed as a discrete unit (Leighton, 2004: 106), frames the painting below, but the painting in the pediment is too framed by the painted horizontal banded frieze decoration, and it is split into two by the centrally placed painted mid-post. The scenes of this tomb's pediment (see Fig. 2.2 - Scenes. 2, 3 & 4) are framed in accordance with both the physical architecture, and the painted elements of the tomb. Thereby, the majority of the scenes in this study have been so partitioned by following the architectural and painted cues of a tomb.

Fig. 2.2: An example of how paintings are partitioned in the 530 BC *Tomb of the Bulls*.

Ambiguity amidst architectural and painted framing devices means the paintings are partitioned, and the scenes are selected, based on common trends amongst the literature. For example, the main walls in many Archaic tombs are treated as continuous friezes, such as those of the *Baron*, *Funeral Bed*, *Hunter*, *Hunting and Fishing*, *Inscription*, and *Bacchantes*, almost like a single canvas (Leighton, 2004: 106). Therefore, in such instances elements of a painting are grouped together to form a narrative. These elements are usually in close proximity to one another, and their discussion as a cohesive unit forms a natural scene within a painting. This is most evident amidst the *Tomb of the Bulls* in the two scenes above the doorways (see Fig. 2.2 - Scenes. 5 & 6). The leftmost scene depicts two individuals engaged in sexual activity and a bull, and the rightmost scene depicts another two individuals engaged in sexual activity and a charging Achelous. These two groupings, although inhabiting the same visual space and relationship, are often discussed separately (see Oleson, 1975; & Simon, 1973). This, combined with the significant empty space between the two groups, makes the partitioning into two separate scenes logical and justifiable. The use of painted doors or evenly spaced trees also helps to separate and frame the paintings into scenes (Leighton, 2004: 106). Some tombs, such as the *Bartoccini*, *Biga*, and *Bulls*, also have an additional narrow register (see Fig. 2.2 - Scenes. 5 & 6), which presents a two speed narrative, with different subjects and figures at a reduced scale above the main murals (Leighton, 2004: 106). This narrow register is too used to dictate the partitioning of a scene, as so used in the *Tomb of the Querciola I*.

The *Tomb of the Leopards* best illustrates this modified approach to scene identification, which as it is based on the common conventions within literature, is called the narrative scene partition (see Fig. 2.3). The *Tomb of the Leopards* banquet, something often discussed as a single entity (see Tuck, 1994), comprises one scene, and the pediment, with leopards and fauna, comprises the second scene (see Scene. 1 & 2). The painted and architectural elements, such as the horizontal band frieze decoration and pediment, partition the two scenes. But, the first scene, rather than comprising multiple scenes blocked by the pairs of characters, as indicated by the red lines, instead follows literature conventions to discuss banquets as a singular and combined event, namely by identifying it as a single scene instead of many. It has also been necessary to attribute scenes based solely on the limited availability and/or poor quality of the photographs and drawings of painted tombs. The lack of images for some tombs prevented their meaningful or substantial partitioning into scenes, and the low quality of some images has similarly prevented any of the aforementioned scene attribution procedures. This is not a substantial problem as scenes are still allocated to the few available images of a tomb, or to the low quality images of a tomb, but such occurrences do somewhat corrupt the processes of scene attribution. The process of partitioning images into scenes is not without precedent, as Brandt employed a similar approach

in his discussion of continuity or change in Etruscan funerary ideology and practices from the 6th — 2nd century BC (2015: 105).

The scenes are the objects arranged by the hierarchical clustering analysis. Their similarity, or lack thereof, in depicting various articles of clothing and adornment types is the measure of what clothing and adornment types 'go together' (see Barthes, 1973: 27), and what clothing and adornment types do not 'go together'. They identify Tarquinian dress groupings by building a text of binary opposition through their shared (or not) presence or absence of clothing and adornment types, which are drawn from the painted typological language of dress. The clothing and adornment types displayed by each scene are an important variable when measuring similarity between scenes. For example, does one scene wear something similar to another scene? Do they share common groupings of dress? Are some scenes more, or less similar to other scenes? The clustering analysis arranges the scenes, the objects, to answer such questions by identifying the similar clothing and adornment type structures amidst and across such scenes, as well as their associated *other* content types. The file-structure of this study illustrates the organisation of scenes (the objects to be clustered) via tomb and chronological order (see Fig. 2.4 & Fig. 2.5). Numbered scenes connect with named tombs for the purposes of examination, analysis, and later interpretation. The scenes also have an individual variability in quality indicated by an alphabetical designation within the file structures of this study (see Fig. 2. 4). The scenes are the assembled objects whose similarity is determined by a comparison of their variables (the clothing and adornment types and *other* content types).

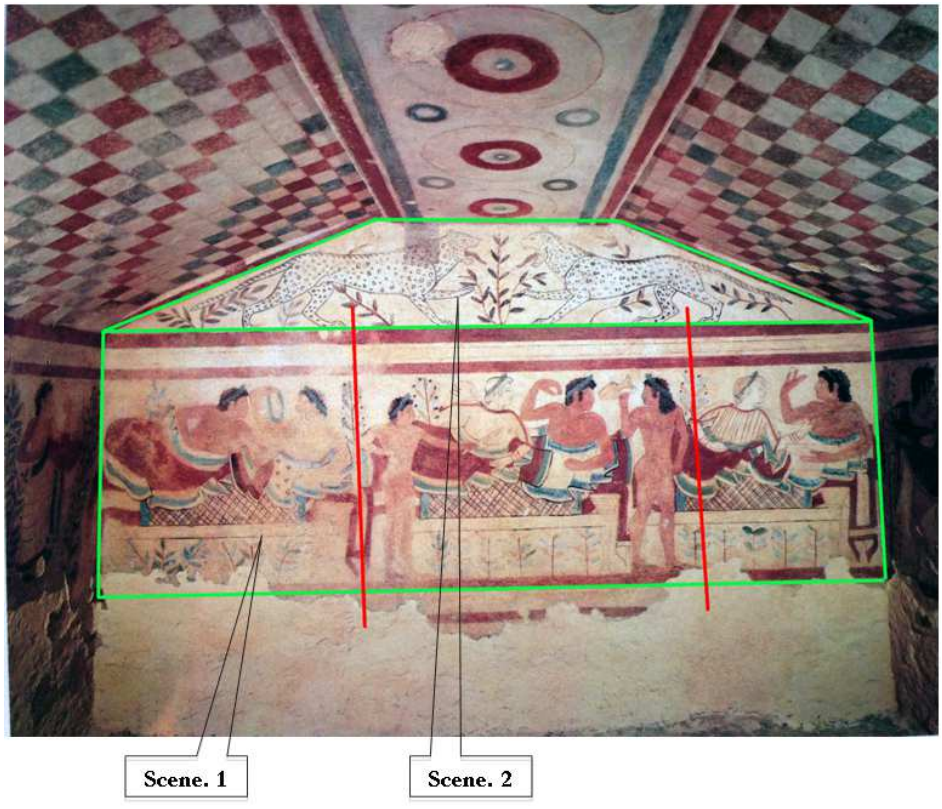


Fig. 2.3: An example of how paintings are partitioned in the 480 BC *Tomb of the Leopards*.

2.3 - Building the Text Part. 2: Definition of a Set of Variables on which to Measure the Entities in the Sample (or the Attributes of the Objects)

A language of clothing and adornment types implies the existence of a stock of words, a vocabulary formed by unique types of dress. These *fixed* types have particular attributes, which correspond with, or rather define, the type (Wendrich, 2013: 88). Baseball caps, bearskin hats, fedoras, or top hats are unique types amidst the vocabulary of dress. Pairs of jeans, a dress, a t-shirt, a necklace, or bracelets are similarly unique types in this vocabulary. Their type classification is based on a selection of their attributes that are considered relevant, such as shape, size, and fabric (Wendrich, 2013: 88; also Eicher & Roach-Higgins, 1992: 2; see Fig. 2.6). The types of dress that can be worn in composition with other types of dress are what constitute the utilisation of this vocabulary. An individual choosing to select a pair of blue jeans, a white t-shirt, and navy converse trainers from his or her wardrobe is selecting individual words to display as a series of related entities on their body. It is in the same manner that this individual orders their breakfast — they articulate themselves by selecting words from their language, which when put together in the right order ensures they receive their cappuccino and chocolate muffin — and not a diet coke, a pack of cheese and onion crisps, and a confused look from a bemused barista. The language of dress is akin to *language* in that each individual has their own vocabulary, their own stock of words, or types. However, these words are found in their wardrobe, and not their dictionary or thesaurus, and they are written on their body and not a piece of paper (see Lurie, 1981: 11). Hence, variability between utilisations of dress's language is exploited to compare the clothing and adornment type groupings between two or more wearers (i.e., measuring painted scene/object similarities and dissimilarities).

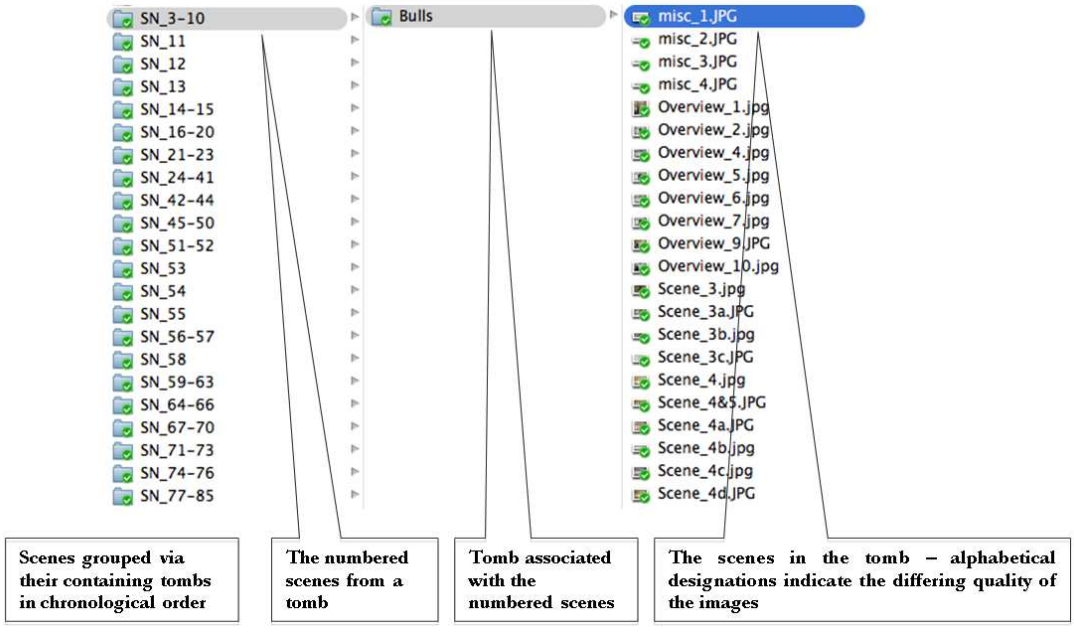


Fig. 2.4: The file structure used for this study.

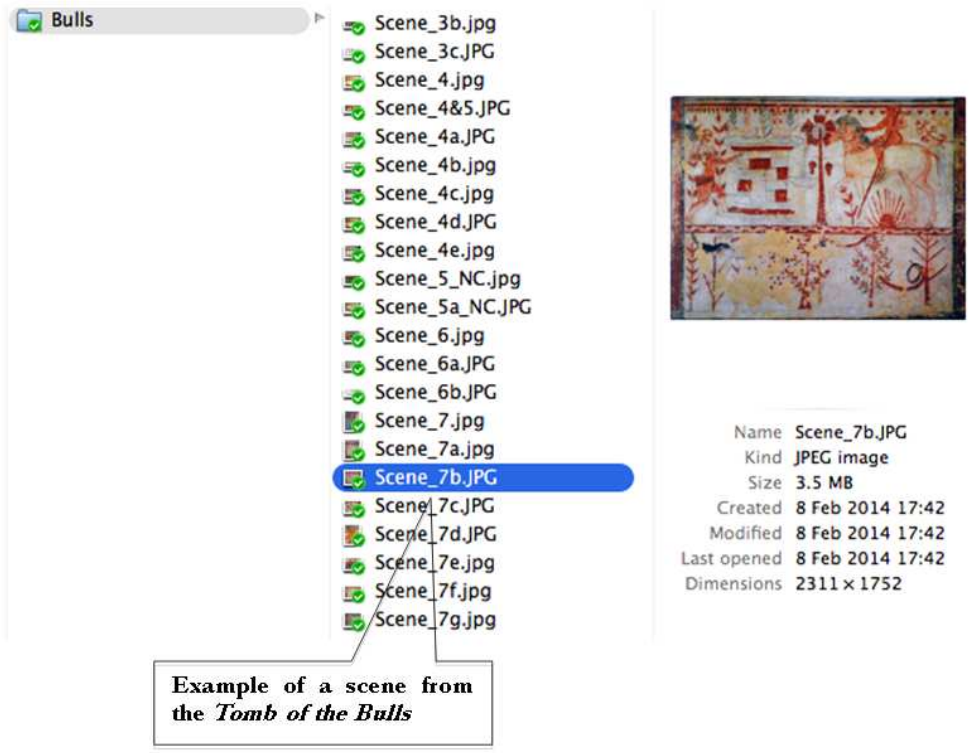


Fig. 2.5: A scene in the context of the studies overall structure. The scenes are numbered in ascending order based on chronology. For example, the first scene (Scene 1) is from the *Tomb of the Panthers* 600 - 590 BC, and so on and so forth.

Variability emanates from the different types of clothing and adornment combined on a body to make up its dress composition. The above examples utilised items of dress that are familiar, and products of recent history. Therefore, it is unnecessary to employ a statistical methodology to untangle their language of dress usage, as their bodily clothing and adornment type compositions are well known. Baseball caps are part of a baseball uniform, a bearskin hat is worn with ceremonial military regalia, a fedora was initially worn with sharply tailored suits and later with leather jackets and jeans, and top hats worn with shawl, single breasted, four pocket vests, frock coats, and black wool trousers. Clustering analysis is here unnecessary as their dress codes are relatively current and comprehensible to those who created it, presented it, modified it, misinterpreted it, maintained it, and embodied it; they are accepted community dress codes. However, the code of Tarquinian painted dress is unknown, unaccepted, and its living community is inaccessible. Hence, the requirement to decipher and translate its painted language of dress via the use of a hierarchical clustering analysis. This analysis identifies how the painted Tarquinian clothing and adornment types go together, and how they do not go together. It exploits dress's inherent binary contrast of presence and absence, and provides a means to understand its classifications, rather than just identifying its defining words, or types (Wendrich, 2013: 86).

Clothing and adornment types are distinguishable by their specific and cohesive combination of features (Krieger, 1944; also see Whallon, 1972: 14). T-shirts are not a dress, a baseball cap is not a top hat, a pair of trainers is not a pair of brogues, and a pair of black formal trousers is not a pair of tracksuit bottoms. Unique types share specific construction properties, they are a word, and a recognisable clothing and adornment type (see Gleba, 2012: 53). Short-sleeved red t-shirts are different from short-sleeved blue t-shirts, but this is a difference of degree, rather than of type. Both share, regardless of colour, a specific construction, but differ in their decoration. The colour of a type does not, in most cases, shift a significant attribute of said type. A red t-shirt worn with blue jeans, or a blue t-shirt worn with red jeans, does not alter the suitability of the relationship between the jean and t-shirt types. They remain two types worn together at a specific place and time, on a body, and their colour variance does not corrupt the suitability or validity of their typological composition. However, wearing a highly incongruent series of types will mark the wearer as peculiar, deranged, or even dangerous (Lurie, 1981: 25). The groupings of clothing and adornment types are vital, as these groups form the basis of the articulated language of dress, its speech, and it is their combination and composition (or not) that provides the cues to their translation (Sorensen, 1997: 98).

The clothing and adornment typology was identified by documenting the different painted forms of dress depicted throughout the Tarquinian tomb paintings, and then grouping together those that shared matching properties into a type (see Fig. 2.6). This defined typology acts as a set of variables, which is used to measure the similarity of the objects, the individual scenes. Displayed clothing and adornment types determine a scenes level of dressed similarity with its many counterparts. Thus, clothing and adornment type presence or absence correspondence is used to measure the similarity between scenes, by comparing and contrasting their different *combinations* and/or *compositions* of painted dress. By sketching every piece of dress depicted within the tomb paintings their unique words were documented, and a typology created (see Fig. 2.7). Sketching consisted of exact line drawings, created in *Corel Draw*, mimicking without deviation every separate piece of dress depicted throughout the tomb paintings (see Fig. 2.8). However, the poorer quality of some paintings necessitated that the artistic copies of the tomb paintings be used to compensate, and to supplement, any line drawing with such low quality or fragmented paintings as its source. The creation of such a typology is inherent within dress, as it possesses clearly defined categories that each share similar attributes of construction, and thus clearly defining specific clothing and adornment types.

Types were specified (accommodating for the 2D confines of their painted medium) by using the 'classification system for types of dress and their properties' (Eicher & Roach-Higgins, 1992: 2; see Fig. 2.6). The classification system provides an unbiased framework for describing indi-

vidual types of dress (Lee, 2015: 23). Types are specified according to their properties, which include colour, volume and proportion, shape and structure, surface design, texture, odour, sound, and taste (Lee, 2015: 23). They are also classified according to locus on the body, whether general, such as head, arms, legs, or more specific, such as lips, breasts, ears, eyelids, hands, or feet (Lee, 2015: 23). This classification system includes both body modifications and body supplements (Lee, 2015: 23). Its two axes reflect this studies' phenomenological approach to the dressed body (see Lee, 2015: 23). Thereby, the line drawings with comparable properties, according to the criterion of the classification system, were grouped together to form a type, what has previously been discussed as a sign, or a *word*. This classification of types reduced the hundreds of sketched line drawings to a dictionary of 94 unique clothing and adornment types, or words (see Fig. 2.9 & appendix C). Clothing and adornment types are constitutive of words and each type is representative of a larger grouping of similar line drawings with more or less similar properties to their archetypical representation. The typology derives the language populating the painted Tarquinian sartorial dictionary, which is utilised throughout the tomb paintings. Clothing and adornment types are the key variables measuring the similarity between the different scenes; variables reflecting the structural combinations, compositions, styles, and fashions of the painted dress depicted throughout the Tarquinian tomb paintings.

	Properties							
Types of dress[b]	Color	Volume & proportion	Shape & structure	Surface design	Texture	Odor	Sound	Taste
Body modifications								
Transformations of								
a. Hair								
b. Skin								
c. Nails								
d. Muscular/ skeletal system								
e. Teeth								
f. Breath								
Body supplements								
Enclosures								
a. Wrapped								
b. Suspended								
c. Pre-shaped								
d. ab, ac, bc, abc								
Attachments to body								
a. Inserted								
b. Clipped								
c. Adhered								
Attachments to body enclosures								
a. Inserted								
b. Clipped								
c. Adhered								
Hand-held objects								
a. By self								
b. By other								

Fig. 2.6: Classification system for types of dress and their properties (Eicher & Roach-Higgins, 1992: 2).

The accurate identification of clothing and adornment types is an important preliminary to analyses of dress as a form of non-verbal communication (Eicher & Roach-Higgins, 1992: 2). They are a shortcut to quickly describing key components of dress (Wendrich, 2013: 88), and are very much akin to traditional pottery typologies (see for example Perkins, 2007). The identification system imposes an arbitrary separation between biologically determined body characteristics and dress, each of which is always perceived in relation to, or potentially in relation to, the other as a gestalt (Eicher & Roach-Higgins, 1992: 2). This system is used to identify the clothing and adornment types from the myriad of line drawings, and thereby to formalise and establish their classification as fixed types (see Wendrich, 2013: 88). The classification system indicates sub-types of body modifications and supplements and provides a scheme for cross-referencing these sub-types with their properties i.e. an A-line long coat, with patch pockets as structural sub-units, qualifies as an enclosure, with its overall shape dependent on wrapping, suspension, and pre-shaping of fabric (Eicher & Roach-Higgins, 1992: 1). Therefore, it designates polythetic classifications, whereby an entity must exhibit most but not all of a specified set of properties in order to be assigned to a type, but no single property is either a necessary or a sufficient condition for type membership (see Adams & Adams, 1991: 226). Such flexibility is more beneficial than stricter and unnecessarily excluding monothetic classifications (Adams & Adams, 1991: 226). The meanings communicated by dress may emanate from its basic clothing and adornment type, one of its properties e.g. colour or shape, or a composite of its component types or properties (Eicher & Roach-Higgins, 1992: 4). The colour (a single property) of a businessman's tie may be a more important indicator of his identity than is his total ensemble of suit, shirt, tie, socks, and shoes, or vice-versa (Eicher & Roach-Higgins, 1992: 4).

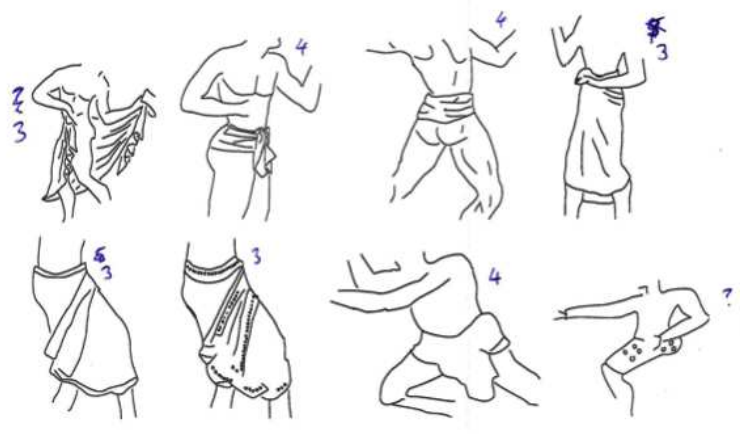


Fig. 2.7: Unsorted and un-typed sketches (see appendix D for full array of unsorted and un-typed sketches). The hand written numbers indicate potential membership to a particular type. There are many similar sketches identified as a single type (for example no. 4 and also no. 3 as shown above). That things are recognised as similar or dissimilar (according to set properties) is fundamental to the process of classifying a type (Aldenderfer et al, 1984: 17).

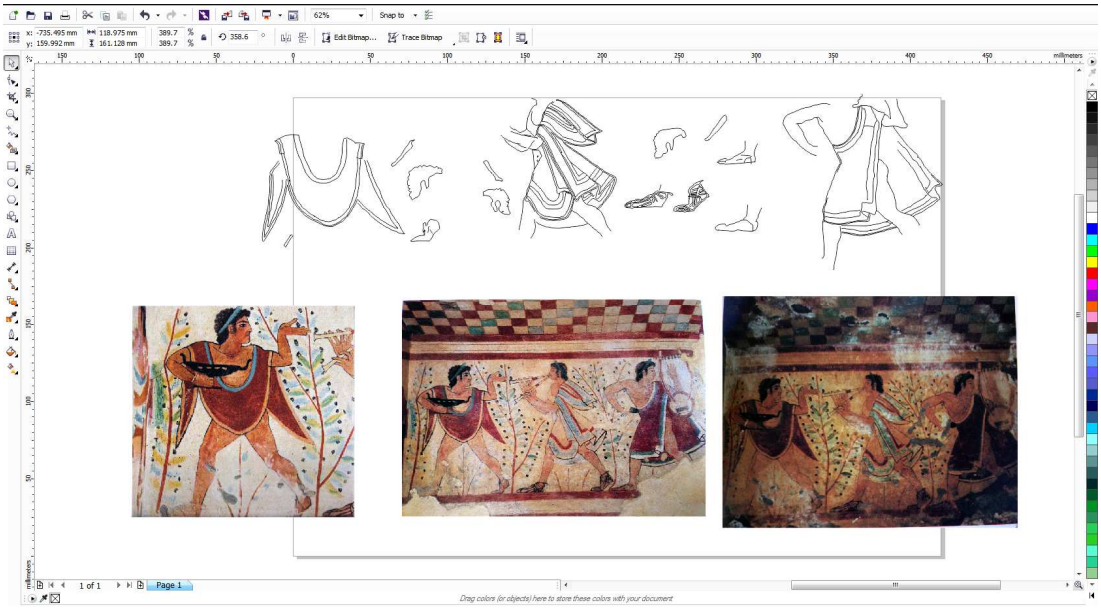


Fig. 2.8: The sketching of clothing and adornment types in Corel Draw.

Documenting unique clothing and adornment types in this way identified a sartorial dictionary, a wardrobe, and a vocabulary, for the tomb paintings. The 94 clothing and adornment types are the words combined, manipulated, and displayed throughout the 96 painted tombs. They are the key variables used to measure the objects in the sample, the scenes. As variables of measurement they piece together the similar scenes, as they are clustered according to their arrangements of painted dress. However, it is necessary to document and record everything depicted within the painted tombs; the *other* content types displayed alongside the clothing and adornment types. These *other* content type variables are also used to measure the similarity of the entities, the scenes, in the sample. The clothing and adornment types in these paintings, the words, are not worn or displayed in a vacuum, but at a specifically depicted place and time, any change in which can alter their potential significance (Lurie, 1981: 30). The *other* content types provide a much needed layer of context. The *other* content type categories are human, natural, and cultural, colour and pattern (see Fig. 2.11). Partitioning the *other* content types provides a greater degree of analytical flexibility, and is similar to Tilley's approach at Nämforsen (Tilley, 1991). The *other* content type variables facilitate the comparison of the clothing and adornment types against a set of clearly demarcated contextual criteria, and thus allow for a clearer examination of the clustered dress groupings. They provide a background to the clothing and adornment types, by determining who wore the types, when they wore them, who they wore them with, and what else was happening while they were being worn.

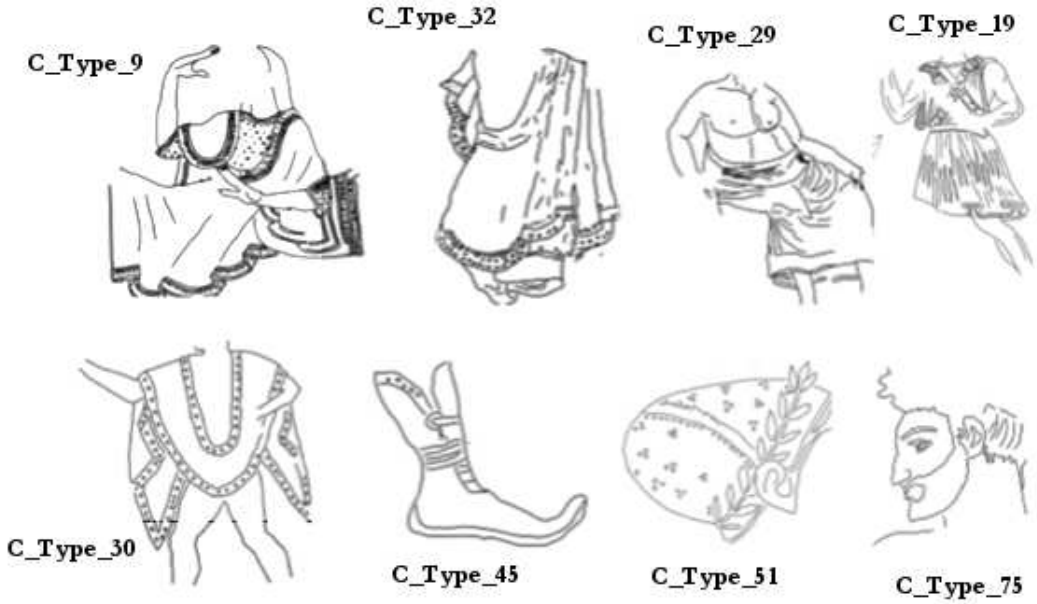


Fig. 2.9: A sample of the clothing and adornment types. These are constitutive of words, and each type is representative of their larger group of similar sketches (for full typology see appendix C).

The *other* content types provide the context required to situate the groupings of clothing and adornment types. This need is attested by studies across a variety of disciplines (see Becker, 2010; Castor, 2010; or Vincent, 2012). *Other* content types can be anything, be it a man, a woman, a flute, a seascape, a banquet, or a chariot race. It is any *other* painted content that appears alongside the clothing and adornment types in the tomb paintings of Tarquinia. Clothing and adornment types are but a component amidst a composite including material and social objects, as well as people, that contribute meaning (Eicher & Roach-Higgins, 1992, 1992: 5). The data provided by Stephen Steingraber, which includes a complete list of *other* content types for the painted Tarquinian tombs, in the appendix of *Abundance of Life: Etruscan Wall Painting* (Steingraber, 2006), and *Catalogue Raisonne of Etruscan Wall Paintings: Etruscan Painting* (Steingraber, 1986), was entered into a spreadsheet and reorganised into the aforementioned categories for use in this study. The data was edited to remove errors and replication, as well as to remove *other* content types that do not appear in the Tarquinian tomb paintings. Although their categories are artificial in nature, they facilitate data analysis by imposing a workable structure onto the *other* content types (see Fig. 2.10). It is possible for *other* content types to be present in one or more category, but this is not problematic, as the categories merely facilitate a manageable analysis, and are not intended as lists of definitive classification (see appendix E).

The communicative capability of dress is dependent on its context, and to wear what is correct is to be contextually involved, and to wear what is incorrect is to be contextually excluded (Lurie, 1981: 16). The clothing and adornment type groupings association with *other* content types identifies commonalities and outliers within their associations, audiences, and contexts. For example, it is possible to discern what should, and what should not, be worn at a Tarquinian banquet, athletic competition, funerary procession, journey to the Underworld, etc. Those incorrectly dressed for an occasion or activities are an important discrepancy, as much as those depicted as correctly dressed are similarly an important distinction. Identification of *other* content types in a scene is based on the descriptions provided by Stephen Steingraber for each tomb in both *Abundance of Life: Etruscan Wall Painting* (Steingraber, 2006), and *Catalogue Raisonne of Etruscan Wall Paintings: Etruscan Painting* (Steingraber, 1986). *Other* content types are content insofar as they too populate the tomb paintings of Tarquinia i.e. they are drawn into the paintings. The word *content* does not imply a conceptual limitation, a seascape is content, and a chariot race is content, just as a flute or fountain is content. The implications of each piece of *other* content are fully considered when discussed alongside their associated clothing and adornment types. The seascape, for example, is acknowledged as a context or setting, the chariot race as a sporting event, etc. The unique implications of each piece of *other* content type provide the vital elements of association, audience, and context to the clothing and adornment types.

Think of the clothing and adornment types worn at a ballroom dance, and the type of people you would expect to see, and the type of things you would expect to encounter, and the type of things you would not expect to encounter. A familiar setting, with a known and expected dress code, is again used to illustrate the important point of known and unknown dress codes. Readers familiar with a ballroom dance are aware of the different clothing and adornment types at such an event, and how such types should and should not fit together at this place, and point in time. Such a reader is also aware of the correct, and thereby appropriate, *other* content types presented alongside the clothing and adornment types at such an event. Within such a situated dress code, signs (namely, the clothing and adornment types and their properties) are imbued with particular meanings when juxtaposed with other signs, or rather types (Lee, 2015: 24). Each sign comprises a signifier, that is, its physical form, and what is signified, that is, the mental concept or associations behind the physical form (Lee, 2015: 24). The relationship between the signifier and the signified is both arbitrary and culturally determined (Lee, 2015: 24). The meaning of the sign generated by the combination of the signifier and signified also shifts through time, and according to context (Lee, 2015: 24). Albeit, the signs of dress are polysemic, and so will be read differently by different viewers; such as by a viewer with a flawed or overdeveloped grasp of the coding communities expectations, or by a viewer who belongs to an altogether different coding community (Davis, 1994: 8-10). That is to say nothing of the contrast between intent

and perception, and the contrast between meaning and comprehension, surrounding such clothing and adornment types, and *other* content types; dichotomies borne of a tension between individuals negotiating with their wider societal context. A tension continually propagated by the coding community, which ceaselessly re-establishes and re-conditions the accepted painted clothing and adornment typology, and the typologies' associated *other* content types.

Human:	Male	Female	Living	Dead	Young	Middle-Aged	Old	diver	agonothetes
Natural:	animal (unspecified)	animal fight						bear	billy goat (see ram)
Cultural:	Achelous Head	Achilles						acrobat	acroterion
Colours:	Black	Red	Dark Red	Light Red	Ocher	Light Gray	Gray-Blue	Red Brown	Orange
Patterns:	checkerboard	Four dot rosettes	Four dot rosettes alternating with cross	striped ceiling	comb frieze	circle pattern	herringbone pattern	leaf frieze or pattern	lozenge frieze or pat

Fig. 2.10: Excerpt from the spreadsheet displaying the *other* content types in their categories.

Fig. 2.11a: **Human Examples:** Lyre player, athlete, juggler, male, female, etc.- people, humanity, human activity.

Fig. 2.11b: **Cultural Examples:** Vanth, Charun, kline, banquet, etc. - myths, objects, and performances/action.

Fig. 2.11c: **Colour Examples:** Red, Yellow, Ocher, Grey, etc., — the colours in the tomb paintings.

Fig. 2.11d: **Patterns:** Wave, herringbone, horizontal band, etc., — the patterns in the tomb paintings.

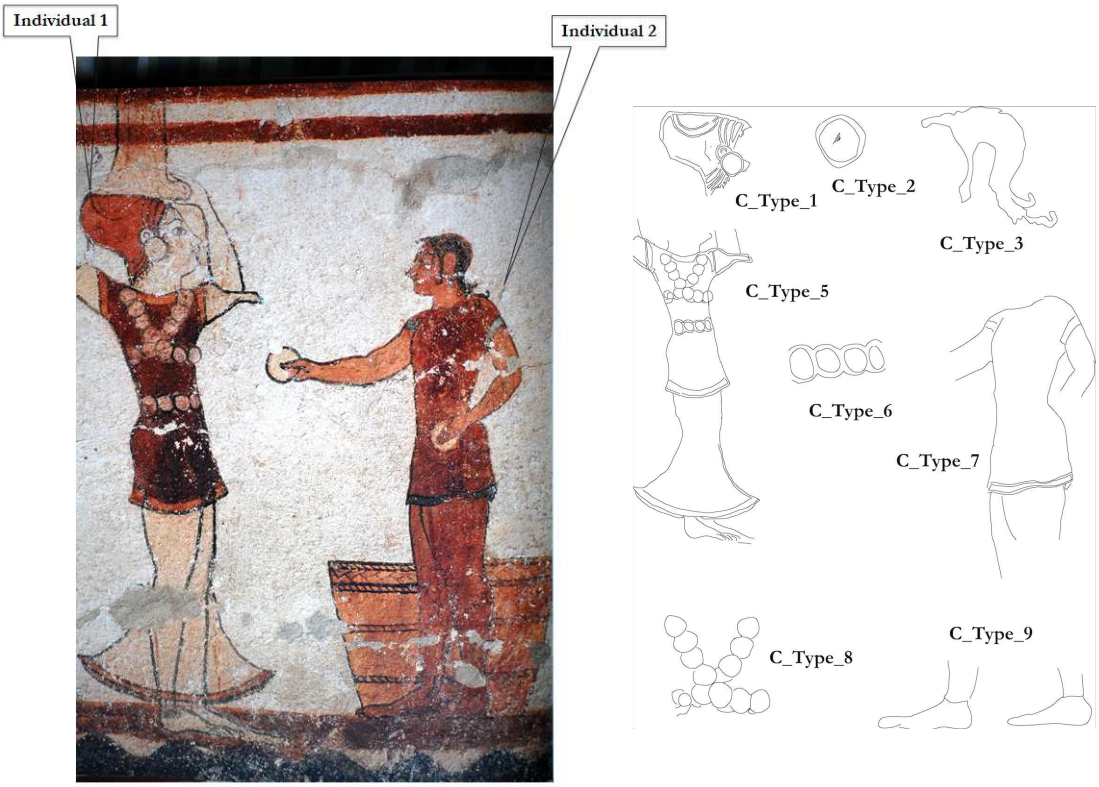
Fig. 2.11e: **Natural:** Leopards, panthers, dogs, plants, etc. — anything that is natural.

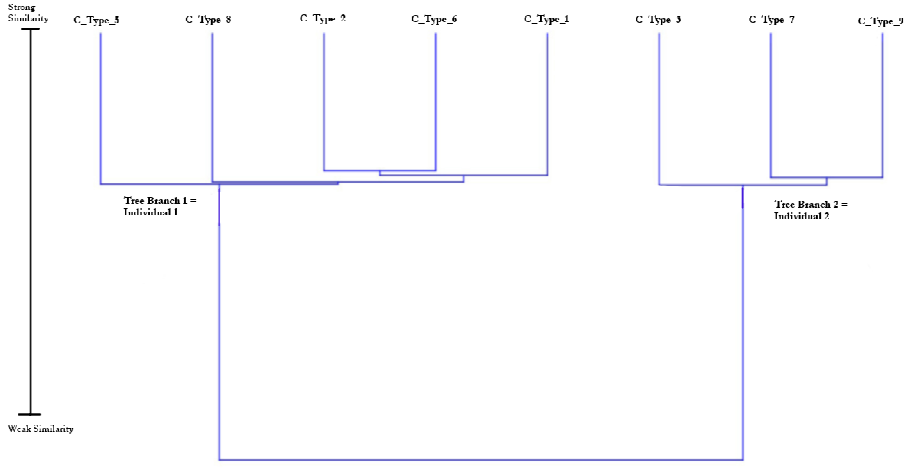
The strangeness of encountering those not sartorially belonging at a ballroom dance is readily apparent. Sartorially strange individuals contrast those correctly sartorially participating. This contrast suggests the strange individuals are not part of the ballroom dance. That they are unfamiliar with the dress code of such an event, or that they are familiar with the event, but do not care to follow its established sartorial codes. The understanding and sartorial acceptance of fel-

low participants, dressed in similar apparel, would likewise evaporate if wearing ballroom dancing attire to go ice skating or shopping. Yet, if remaining at the ballroom dance the associations, audiences, and contexts would continue to accept and appreciate the correct attire. It is difficult, if not impossible, to fully understand the clothing and adornment type groupings in the Tarquinian tomb paintings without also considering the *other* pieces of content, the *other* content types that provide insight into the correct or expected association, audience, and context. How else to discern the preverbal ice skating ballroom dancer? Thus, it is only through a combination of both the clothing and adornment types, and the *other* content types, that the similarities of the scenes are accurately measured. As a result what appears with what, and what does not appear with what — speaking of both clothing and adornment types and the *other* content types as individual elements, and also as combined elements— in the tomb paintings can be discerned. From this absence and presence perspective a binary data matrix text of the Tarquinian tomb paintings is constructed, which is a text with clothing and adornment types as its core narrative, a text of binary opposition. A text built of signifier and signified, which defines the attributes of the objects (painted scenes).

By way of example, the scene below simplistically illustrates how clothing and adornment types (the defined variables) are arranged by the application of a hierarchical clustering analysis to measure the dressed similarity between entities (see Fig. 2.12). The left-most image displays a single scene from the *Tomb of the Jugglers*. This scene depicts two individuals labelled '*Individual 1*' and '*Individual 2*'. This example works at the individual level of unit scale, as opposed to the scene level of unit scale, so as to more clearly illustrate the combination of cluster analysis, and dress theory. The line drawings depict the clothing and adornment types, the dictionary, present in this single scene. The dendrogram output by the clustering of this scene identifies its two dress groupings. *Group A* dresses '*Individual 1*' and *Group B* dresses '*Individual 2*'. The dressed individuals in the painted scene have been quantified according to their depicted language of clothing and adornment types. Their individual groupings have been identified by clustering their binary data-matrix, which records the absence (0) and presence (1) of the scene's language of dress for each individual. This simplified example demonstrates how the clothing and adornment types depicted within the painted tombs of Tarquinia are analysed by a clustering analysis. It is a simplified presentation of the method that identifies groupings of clothing and adornment types. The larger-scale method encompasses more clothing and adornment types, and more scenes, depicting more individuals, and *other* content types. However, the key principles shown by this example remain the same regardless of scale. The clustering analysis identifies the relationships, the groups, what appears with what, what does not appear with what, and in so doing it quantifies the tomb paintings of Tarquinia according to their depictions of dress. The clothing and adornment type combinations and compositions, or lack thereof, amongst the

scenes, are pieced together by the clustering analysis. They are the key variables (alongside the *other* content types) defined so as to measure the similarity between scenes, and thereby to gauge their groupings of painted dress.





	Individual 1	Individual 2
C_Type_1	1	0
C_Type_2	1	0
C_Type_3	0	1
C_Type_5	1	0
C_Type_6	1	0
C_Type_7	0	1
C_Type_8	1	0
C_Type_9	0	1

Fig. 2.12: The binary data-matrix of the exemplar scene and its corresponding dendrogram output by clustering the simplified example scene. This is a basic visual representation of how clothing and adornment types and clustering analysis are used by this study to examine Tarquinian tomb paintings and their dress.

2.4 - Building the Text Part. 3: Creation of a Binary Data-Matrix (or Entering the Data)

The binary data-matrix records and documents the presence and absence of clothing and adornment types, and *other* content types, throughout the painted scenes of this study (see appendix F). It builds the text, which is read by the clustering analysis. The text is a binary quantification of the tomb paintings; it is their numerical reflection. The creation of the data-matrix involved examining each scene in the sample, and recording the variable types occurring within each individual scene. Binary data types on a nominal measurement scale[2] were used to record the presence or absence of variables. The spreadsheets of this study are arranged in a standard Q & R mode format (Lorr, 1983: 122). The objects (the tomb painting scenes) form the rows, while the variables (the clothing and adornment types and *other* content types) form the columns. The 'ALL' spreadsheet is sub-divided into six different spreadsheets by using the *other* content types as categories of organisation. There is also a spreadsheet only for the clothing and adornment types, which creates — accounting for 6th, 5th, 4th and 3rd/2nd century BC chronologies, and 'ALL' chronology — 35 individual dendrograms — seven per chronology. The process to generate binary numerical data using the variable types is detailed below:

Step 1: Creation of a Microsoft Excel workbook with seven spreadsheets — a single spreadsheet contains every category of type variables (ALL), a single spreadsheet contains only the clothing and adornment types, and five other spreadsheets contain the clothing and adornment types and only a single *other* content type category — data to initially only be entered into the spreadsheet containing every category of type variables

Step 2: Examination of the individual scenes recording clothing and adornment types — 1's and 0's to indicate a presence or an absence of a clothing and adornment type

Step 3: Re-examination of the individual scenes recording the *other* content types — 1's and 0's to indicate a presence or an absence of *other* content types

Step 4: Copy the relevant parts of the data-matrix into their category appropriate spreadsheet

The binary data-matrix builds outward from a micro to a macro scale. It records:

i. What scene is in which tomb

ii. What clothing and adornment types are in which scene

[2] Note: due to the binary nature of the data it is not necessary for it to be standardised as the attributes are either present or absent. It is a nominal scale of unordered classes (Romesburg, 1984: 34).

iii. What clothing and adornment types are in a scene with other clothing and adornment types

iv. What *other* content types are in a scene with what compositions of clothing and adornment types

v. What compositions of clothing and adornment types and *other* content types are in a scene

vi. What compositions of clothing and adornment types and *other* content types in a scene are in a tomb with other similar or different scenes

vii. The scenes that make up a tomb

viii. How the scenes of a tomb typologically compare to those in other tombs

The binary data-matrix numerically represents the articulated language of clothing and adornment types used throughout the 96 painted tombs. It records the presence or absence of clothing and adornment types, as well as their *other* content types. The clothing and adornment types are words, and the *other* content types contextualise these words. Their quantification for statistical analysis has much in common with the methodological treatment of Palaeolithic rock art found throughout the Scandinavian regions (such as Miller, 1991 or Ljunge, 2013). Thus, this method is a departure from the norm when compared to previous Tarquinian tomb painting examinations. The lack of a clear, coherent, and connective narrative structure in Palaeolithic rock art necessitates such a combined use of semiotic and statistical methods, as such methods assist in elucidating hitherto unrealised structures, languages, and texts. Similarly, the unreadable text of binary opposition generated by this study necessitates the application of a hierarchical clustering analysis. Recording the utilised language of dress, supplemented by *other* content types, built a text, but to read this text requires a statistical tool.

2.5 - Reading the Text: Computation of the Similarities among the Entities & Use of a Cluster Analysis to Create Groupings of Similar Entities (or Gauging Object Similarity)

The idea that visual culture or imagery expresses or contains ideas as language lends itself to the application of a structuralist and semiotic organisation and computation (Buchli, 1995: 181)[3]. The type of data-matrix that records occurrence and non-occurrence employed in this study is appropriate given that language in the garment system, according to Barthes, is made up by op-

[3] This is especially true in the case of tomb paintings as per discussion in the previous chapter.

positions, that is to say trousers vs. shirt, or shoes vs. socks, the so-called relations of pieces, parts of garments, and details (Barthes, 1973: 27). The variation of such oppositions, or relationships, entails a change in meaning (Barthes, 1973: 27). For example to wear a beret or a bowler hat does not have the same meaning, much the same as to not wear a beret or a bowler hat, in some situations, also does not have the same meaning (Barthes, 1973: 27). The variations of pieces or parts of garments and details are also dictated by the rules which govern the association of the pieces among themselves, such as no white socks with black shoes, no tie with a polo shirt, no jeans with a tuxedo, etc. (Barthes, 1973: 27). Speech in the garment system comprises the individual way of wearing i.e. size of garment, degree of cleanliness or wear, personal quirks, free association of pieces, where it is worn, what it is worn with, etc. (Barthes, 1973: 32). The method of this study constructed a binary data matrix, or rather a text, congruent with the principles of this garment system. It is based, much like the 'fashion system' proposed by Barthes (1973), on the presence or absence of garments.

PAST (*Paleontological Statistics*) is used to read the binary data-matrix text. It is a comprehensive, but simple to use software package for executing a range of standard numerical analyses and operations used in quantitative palaeontology (Hammer et al, 2001). It integrates spreadsheet type data with univariate and multivariate statistics. It has been chosen as it is simple to use, free, well supported, outputs colourful and detailed graphs, and contains the statistical operations (such as the required algorithms and similarity measures) needed for the study[4]. It allows for the data matrix to be analysed via a series of different hierarchical clustering techniques (Hammer et al. 2001: 1). Hierarchical cluster analysis is an explorative technique for identifying groups and subgroups in a multivariate dataset, based on a given distance or similarity measure and clustering algorithm (Hammer & Harper, 2006: 67). This analysis finds groups of similar items well separated from other groups, and such groups are searched for on the basis of similarities in measured or counted data between the items (Hammer & Harper, 2006: 67).

The general underlying mechanism for this type of agglomerative clustering is first to join the two most similar objects in a cluster, and then to join the second most similar objects, and then to join the third, fourth, and so on, in a process that eventually groups all objects into one super-cluster (Hammer & Harper, 2006: 68). The different algorithms i.e. the method by which the similarity between objects is determined differ in how they define the distance between clusters (Hammer & Harper, 2006: 68). The choice of algorithm directly impacts what objects are grouped together or determined as similar. Mathematically speaking the greater the distance between two objects, in numerical terms, the less similar they are and vice-versa, with a smaller

[4] Other statistical packages, such as SPSS and OriginLab, would be suitable for use with this study. However, they are expensive and SPSS in particular does not output the most useful or attractive graphs.

numerical distance indicating a greater degree of similarity between two objects. Therefore, agglomerative clustering methods produce groupings at varying levels of similarity. These different levels of similarity are important in the later stages of the methodology, whereby they determine if clothing and adornment types are *worn* together in a composition, or *seen* together in a combination.

The objects, the painted scenes in a tomb, are classified according to their variables, the clothing and adornment types, and the *other* content types. The individual objects can, on these grounds, be plotted to a unique position, and the aim of the various clustering algorithms is to unite into one cluster those points that are close to each other (Cavanagh, 1987: 162). This study uses the unweighted pair-group average algorithm (also known as UPGMA, average link clustering, or mean linkage see Sokal & Michener, 1958) and the Raup-Crick similarity index (Raup & Crick, 1979). In UPGMA clustering the distance between two clusters is defined as the average of all possible distances between pairs of groups (Hammer & Harper, 2006: 74). This method is preferred as all members of the groups contribute equally to the distance measure, and because it generally works well in practice (Hammer & Harper, 2006: 75). It is the most often used hierarchical clustering algorithm and holds a balanced position in relation to the other available algorithms (Romesburg, 1984:7). The Raup-Crick similarity index is recommended for use on a binary data-matrix and is used to compute the similarity amongst the entities prior to clustering (Hammer & Harper, 2006: 75). It also utilises a randomisation 'Monte Carlo' procedure that assists in cluster validation (Raup & Crick, 1979).

The UPGMA clustering algorithm is biased towards producing clusters of similar variance (SAS Institute Inc., 2011). However, the nearest neighbour joining (also known as single linkage) clustering algorithm tends to produce long, straggly clusters and unbalanced dendrograms (Milligan, 1980: 335). The furthest neighbour joining (also known as complete linkage) clustering algorithm has precisely the opposite problem of nearest neighbour joining, as its clusters are not allowed to elongate in multidimensional space, and as a result it is biased towards producing clusters of equal diameter, whilst also being very sensitive to outliers (Hammer & Harper, 2006: 74). In centroid clustering (Sokal & Michener, 1958) the data points are treated as if they reside in a Euclidean space where only the Euclidean distance measure is appropriate (Hammer & Harper, 2006: 75). While this form of clustering is robust to outliers it cannot be used with a presence-absence binary data set as it is not constrained to a binary value or vector, but can end up at any real-valued position, so is incompatible with binary distance measures (Hammer & Harper, 2006: 75). Furthermore, it does not seem to perform as well as average linkage (Milligan, 1980). Ward's method selects clusters for fusion into larger clusters based on the criterion that within-group variance is desired, summed over all clusters, to increase as little as possi-

ble (Hammer & Harper, 2006: 75). It works well in practice, but it implicitly enforces the Euclidean distance measure, and is biased towards producing clusters with similar numbers of items, and is too sensitive to outliers (Milligan, 1980: 340). Of the many clustering algorithms available UPGMA offers the best middle ground, as it sits between the faults and advantages of the other clustering methods, and works well with binary data. Other clustering algorithms, specifically single linkage, complete linkage, and Wards method, are used for comparative purposes to test the robustness of the clustering results produced by the UPGMA algorithm.

The Raup-Crick similarity coefficient is used to compare associations limited to absence/presence data. Its index ranges from 0 indicating no presence to 1 indicating a presence. It was developed as a response to the problems of prior binary similarity coefficients (Raup & Crick, 1979: 1214). The previous binary similarity coefficients, or similarity measures, had not been derived in a mathematically rigorous way; that is, they had been 'thought up' rather than built on sound mathematical principles (Raup & Crick, 1979: 1215). Their validity had all too often been tested by whether they seemed to work in practice (Raup & Crick, 1979: 1215). They had also not been tied to null hypotheses, and as a result statistically meaningful comparisons between values of a coefficient were impossible (Raup & Crick, 1979: 1215). Consequently, it was difficult to say whether two assemblages were similar or dissimilar at the 95% level of confidence, for example (Raup & Crick, 1979: 1215). The Raup-Crick similarity coefficient was developed as a more robust approach to the similarity question (Raup & Crick, 1979: 1215). This is why it is used as the primary similarity measure/coefficient, as it was designed to respond to the shortcomings of previous coefficients, and it works well with the binary data-matrix of this study. However, for validation purposes, the results of the Raup-Crick similarity coefficient are compared with results from the other similarity measures built into PAST, namely the Jaccard (Jaccard, 1908: 226; Hagmeier & Stults, 1964 & Peters, 1968), Dice (Sokal & Sneath, 1973: 128), Simpson (Simpson, 1960), Kulczynski (Sokal & Sneath, 1973: 130), and Ochiai (1957) similarity measures/coefficients.

The PAST spreadsheet is identical to an Excel spreadsheet so the binary data-matrix is imported from Excel into PAST without modification (see Fig. 2.13). The PAST spreadsheet is transposed so that it switches from Q mode, in which clusters of objects are sought, the scenes, to R mode, in which clusters of variables are sought, the clothing and adornment types, and the *other* content types (see Lorr, 1983: 122). This is necessary to produce a dendrogram that displays groupings of clothing and adornment types and *other* content types, and not groupings of scenes. While useful, the latter are less informative than the former. If the objects, the scenes, are defined or measured by their variables, then it is by the variables that the objects are deemed similar or dissimilar to one another. But, when the variables, the types, take the place of the objects,

and the objects, the scenes, take the place of the variables, it is switched around. This is saying that C_Type_1 can be measured by its appearance in scene X, Y, or Z alongside *other* content type A, B, or C, which also appears in scene X, Y, Z - so the scenes now become the means by which to measure or define the similarity, or occurrence, of the types. It is a minor detail but one affecting the output of the clustering analysis. It is also possible to perform both a Q and R mode analysis simultaneously by using PAST's inbuilt two-way clustering mode, and this mode is utilized to better connect the clusters of variables, the clothing and adornment and *other* content types, to their objects, the scenes.

The cluster analysis produces a tree-diagram known as a dendrogram (see Fig. 2.19). The dendrogram is a dichotomously branching hierarchical tree where each branching point corresponds to a joining event during the clustering agglomeration. The branching point is drawn at a level corresponding to the similarity between the joined objects, and this level indicates the degree of separation between clusters or groups. There is a transposed R-mode PAST spreadsheet for each of the Excel data matrices. Thus, a total of seven dendrograms are produced for each chronology and 'ALL' — one for each spreadsheet, and so one for each clothing and adornment type and *other* content type category demarcation. This facilitates a more varied analysis of the clothing and adornment types and the *other* content types, as it creates a greater number of smaller and more manageable dendrogram's. This flexibility and variance of analysis is vital when performing a cluster analysis as it is impossible to anticipate what combination of variables, similarity measures, and clustering techniques is likely to lead to interesting and informative groupings (Everitt et al., 2011: 257). Consequently, it is necessary to be able to alter variables, choose a different similarity measure, or to be able to concentrate on a particular sub-set of the data (Everitt, 2011: 257). The flexibility and variance of this study is necessary so as to be able to ask many pertinent questions. Not just questions evaluating the validity of the clustering solutions (see Dubes & Jain, 1979), but questions concerning what the clustered groupings of painted Tarquinian clothing and adornment types can develop in regard to Tarquinian dress, and wider Tarquinian society. What they can tell about their structural groupings, combinations, or compositions, what they can tell of their fashions, their oppositions, their modes of dress, their pariahs, and their social structures.

	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-9
C_Type_0	0	0	0	1	0	1	1	0
C_Type_1	0	0	0	0	0	0	0	0
C_Type_2	0	0	0	0	0	0	0	0
C_Type_3	0	0	0	0	0	0	1	0
C_Type_4	0	0	0	0	0	0	0	0
C_Type_5	0	0	0	0	0	0	0	0
C_Type_6	0	0	0	0	0	0	0	0
C_Type_7	0	0	0	0	0	0	0	0
C_Type_8	0	0	0	0	0	0	0	0
C_Type_9	0	0	0	0	0	0	0	0
C_Type_10	0	0	0	0	0	0	0	0
C_Type_11	0	0	0	0	0	0	0	0
C_Type_12	0	0	0	0	0	0	0	0
C-Type_13	0	0	0	0	0	0	0	0
C_Type_14	0	0	0	0	0	0	0	0
C_Type_15	0	0	0	0	0	0	0	0
C-Type_16	0	0	1	0	0	0	0	0
C_Type_17	0	0	0	0	0	0	0	0
C_Type_18	0	0	0	0	0	0	0	0
C_Type_19	0	0	0	0	0	0	0	0
C_Type_20	0	0	0	0	0	0	0	0

Types = Object Attributes

PAST spreadsheet transformed from Excel's Q-analysis arrangement to an R-analysis arrangement

Scenes = Objects

Fig. 2.13: The data-matrix imported into PAST from Excel and transposed into an R & Q format from a Q & R format (see appendix G for each PAST spreadsheet).

2.6 - Re-Reading the Text: Validation of the Cluster Solutions

This is not the place for a thorough discussion of cluster analysis, the many details of its procedures, and the many problems and difficulties of its interpretation. However, it is worth highlighting key concerns that apply to this study, and why the validation of the clustering solutions is important. Hierarchical clustering is a relatively simple procedure not supported by an extensive body of statistical reasoning, as is the case with most forms of cluster analysis (Aldenderfer et al, 1984: 14). Although clustering algorithms possesses important mathematical properties that have been explored in detail (see Jardine & Sibson, 1971), it is important to recognise the fundamental simplicity of such methods. They are tools for data exploration and visualisation, rather than codified and formal statistical techniques (Hammer & Harper, 2006: 68). They are little more than a series of plausible algorithms used to create clusters of cases, or rules for creating groups (Aldenderfer et al, 1984: 14). That is not to say they are not useful and valid forms of analysis, as no study has ever shown that mathematical simplicity equates to inferiority (Romesburg, 1984: 30), but the mistake must not be made of excessively reifying the clustering solution (Aldenderfer et al., 1984: 14; also see Whallon, 1972). There needs to be room for interpretation, and the clustering solutions need to be interpreted and understood within their particular socio-cultural context.

Different clustering methods can and do generate different solutions to the same data set, albeit to varying degrees (Aldenderfer et al, 1984: 15). It is a somewhat inelegant aspect of cluster analysis that it is necessary to choose both a similarity measure and a clustering algorithm without any particular combination being universally accepted as 'best' (Hammer & Harper, 2006: 68). This is especially problematic as the clusters obtained are dependent upon the technical details of both the chosen distance or similarity measure and the clustering algorithm (Hammer & Harper, 2006: 65). The differences between clustering solutions stem from their disparate evolutionary sources, each of which emphasised different rules of group formation (Aldenderfer et al, 1984: 15). This can be a source of confusion, but a confusion mitigated through various validation techniques, which can determine if a clustering method has discovered the most 'natural' or 'real' groups that exist in a data set (Aldenderfer et al, 1984: 16). There is a greater confidence that the results of a clustering analysis are worthy of investigation if similar solutions are produced by the different clustering methods (Everitt et al, 2011: 257). Moreover, the groups and subgroups generated by hierarchical clustering can be refined further still through the application of k-means clustering (Bow, 1984). Such clustering requires *a priori* specification of the number of groupings prior to the analysis, and can thus retroactively reaffirm (or dispute) the validity and existence of previously identified groupings within a data set (Hammer & Harper, 2006: 75).

Additionally, although the strategy of cluster analysis is structure-seeking, its operation is structure-imposing (Aldenderfer et al, 1984: 16). That is, clustering methods are used to discover structures in data that are not readily apparent by visual inspection, or by appeal to authority (Aldenderfer et al, 1984: 16). A clustering method always places objects into groups, it always produces a dendrogram no matter how poorly the items are separated, and such groupings and dendrograms may well be radically different in their composition when using different clustering methods (Aldenderfer et al, 1984: 16; Hammer & Harper, 2006: 70). The key to using cluster analysis is to recognise when these groups are *real*, and not imposed on the data by the method. A *real* cluster, a good cluster, a non-imposed and *natural* cluster, can be partly determined through the use of validation techniques (Aldenderfer et al, 1984: 16).

A good cluster is defined primarily by its isolation and cohesion (see Cormack, 1971), but this study also uses five techniques for validating clustering solutions[5]. The validation techniques facilitate comparison, contrast, and discussion, of the clustered groupings of clothing and adornment types. They reaffirm the clustering results reflection of inherent groupings within the data, and not those generated due to the clustering procedures structurally imposing mechanisms. They support a critical discussion of the dress clusters presented by the data, and move the focus of such discourse away from a sole focus on the statistical and methodological generation of said clusters (although such discourse is useful for refinement purposes). They too move this experimental method safely beyond the useful but limited manuals for the re-creation of ancient dress (see Harlow et al, 2005: xii). Manuals concerned only with how classical dress was draped or pinned in order to recreate drama, sculpture or paintings, and amounting to little more than studies in the construction of ancient dress (see Harlow et al, 2005: xii). Bonfante (2003) is too modelled on this limited approach to dress history (Harlow et al, 2005: xii), and does not go beyond issues of connoisseurship, formal analysis, and style (see Lee, 2015: 19). The validation techniques used by this study to reaffirm its original approach are:

Cophenetic Correlation - is the major validation measure advocated by the numerical taxonomists (Sokal & Sneath, 1973). The cophenetic correlation is used to determine how well the tree or dendrogram resulting from a hierarchical clustering method represents the pattern of similarities/dissimilarities amongst the entities (Aldenderfer et al, 1984: 62). By using the dendrogram from a cluster solution it is possible to create an implied similarity matrix that shows the similarities between all pairs of entities as suggested by this hierarchical solution (Aldenderfer et al, 1984: 63). The cophenetic correlation is the correlation between the values in the original similarity data-matrix, and the values in the implied similarity data-matrix (Aldenderfer et al, 1984:

[5] A number of possible approaches to the estimation of cluster significance and the associated problems are provided in the SAS/STAT User manual (SAS Institute Inc., 2011).

63). The correlation measures the agreement between the resemblance matrix, the input to the clustering method, and the tree, the output of the clustering method, to determine how much of the similarity structure in the resemblance matrix is retained in the tree. PAST automatically computes the cophenetic correlation — the higher the value, between zero and one, the stronger the similarity (this studies 'acceptance' threshold is 0.5 and above — rounded to a single decimal place). However, it can generally be a misleading indicator of the quality of a clustering solution due to the large variability for low separation of clusters (Holgerson, 1978).

Replication – compares the clustering results from different algorithms and measures to informally assess the robustness of the groupings. A grouping substantially changed when using another algorithm and measure should not be wholly trusted (Hammer & Harper, 2006: 74). Therefore, in addition to the UPGMA algorithm this study uses single linkage[6] (or nearest neighbour), complete linkage (or furthest neighbour joining), and Ward's method[7] clustering algorithms for comparative purposes. In addition to the Raup-Crick similarity measure this study will also use for each algorithm (excluding Ward's method due to its inherent reliance on Euclidean distance) the Jaccard (Jaccard, 1908: 226; Hagmeier & Stults, 1964 & Peters, 1968), Dice (Sokal & Sneath, 1973: 128), Simpson (1960), Kulczynski (Sokal & Sneath, 1973: 130), and Ochiai (1957) similarity measures, as they too are ideally suited for use on an absence/presence data-matrix (Hammer & Harper, 2006: 81 also see Cheetham & Hazel, 1969; & Romesburg, 1984: 141). The bootstrapping feature of PAST is also used, and the 'Boot N' value is set to 1000 for each analysis. This repeats the clustering procedure 1000 times, based on random selections of columns (Hammer et al, 2001: 10). This gives a good impression of cluster robustness (Hammer & Harper, 2006: 77; see Fig. 2.22).

Significance tests on variables used to create clusters — performs a multivariate analysis of variance (MANOVA) on the variables used to generate the solution to test for the significance of the clusters (Aldenderfer et al, 1984: 64). The performance of standard significance tests is concerned with the quality of the cluster solution as a partition of the data set (Aldenderfer et al, 1984: 64). This test takes the form of a discriminate analysis or ANOVA's - despite their use in this fashion being statistically inappropriate (see Aldenderfer et al, 1984: 64).

Testing for an absence of cluster structure — tests for the absence of a cluster structure in the data set to be clustered (Everitt, 2011: 262). However, such tests are of limited usefulness, and their power is unknown, so much so that it erroneously does not detect any clusters in some cases (Everitt, 2011: 262). These tests are only of theoretical interest, but in conjunction with the

[6] Single linkage (nearest neighbour): Clusters are joined based on the smallest distance between the two groups.
[7] Wards method: Clusters are joined such that increased in within-group variance is minimised — the Euclidean distance measure is inherent to this algorithm.

other measures they assist with interpretation and validation simply by offering a point of comparison.

Rearranging the data-matrix — rearranges values in the data-matrix so as to mimic those given in the tree diagram/dendrogram (Romesburg, 1984: 23). This re-organisation highlights the inter-object similarities in the data-matrix (Romesburg, 1984: 24). This is not a formal validation technique per se, but such a re-arrangement confirms the nature of the similarities suggested by a dendrogram (Romesburg, 1984: 24).

The validation techniques ensure that the organisational structures of the clothing and adornment types are *real* entities identified from within the data set. They provide a measure of data integrity. Furthermore, the full data-matrix is provided (see appendix F), as well as the specific queries of its analysis, and the analyses' outputs (see appendix A). This facilitates a more open, flexible, and reproducible process of archaeological inquiry (see Wendrich, 2013: 91). Similarly, it is acknowledged that there was a process of selection, which although driven by explicit 'theoretical' and 'methodological' strands, deliberately chose the objects, and the attributes used to facilitate their clustering (see Wendrich, 2013: 90). Thereby, the study makes no claim to 'objectivity' (Wendrich, 2013: 90) as its crucial selections were not devoid of purpose. They seek to identify ancient Tarquinian painted dress structures, which is achieved by determining sets of attributes (clothing and adornment types) whose co-occurrence is non-random and intentional (see Read, 2007: 243). They are dress structures that undoubtedly benefitted from considerable thought, effort, and expense. Yet, their identification must be validated, and they also necessitate interpretation via first clearly and precisely contextualising their dendrograms (tree diagrams). Their interpretation must be firmly grounded within the reality, and the understanding, of the painted tombs, and the Etruscan context. Secondly, the clustering process identifies the different groupings of clothing and adornment types, and *other* content types, but it is necessary to cut the outputted tree diagrams (dendrograms) at their different levels of similarity so as to derive their significant groupings (see Aldenderfer et al, 1984: 53-54).

2.7 - Contextualising the Text: Cutting and Interpreting Tree Diagrams

Analysis of the painted tombs produces hierarchical groupings of the clothing and adornment types. These groupings are visible as the individual tree branches of a dendrogram (tree diagram). Tree diagrams are a mathematical and pictorial representation of the complete clustering procedure (Everitt et al, 2011: 88). The nodes of a dendrogram (tree diagram) represent clusters, and the lengths of the stems represent the distances at which the clusters are joined (Everitt et al, 2011: 88). The clusters are read through a process of visual inspection (Romesburg, 1984: 3; see Fig. 2.14). The articulated language of painted dress is displayed through a tree diagram's

groupings of clothing and adornment types. Tree diagrams pictorially translate the articulated language of dress into a form more easily examined. The presence or absence of clothing and adornment types in the painted scenes determine what goes together and what does not go together. To dress is to define and describe, and so what is fashionable, what goes together, are presumably the societal expected and contextually accepted groupings of types (Lurie, 1981: 5). The unfashionable, or unexpected and unaccepted, are those types that are not grouped together, as well as those worn in the wrong context. Varying clothing and adornment type groupings occur at the tree diagram's different levels of similarity, and importantly not all *are fashionable*, *expected*, or *accepted*. The clustering analysis, through displaying similarities and dissimilarities between objects in a data set, illustrates the complementary and uncomplimentary clothing and adornment types, their context, and their audience. The articulated language of dress is formed by the similar and dissimilar groupings of its types, and defines what it *is* by articulating what it *is not*. That relationships, or a lack of relationship, between individual clothing and adornment types, and their *othe*r content types, define their statistically formed groupings is congruent with Barthes notion of the garment system and its oppositional nature (Barthes, 1973).

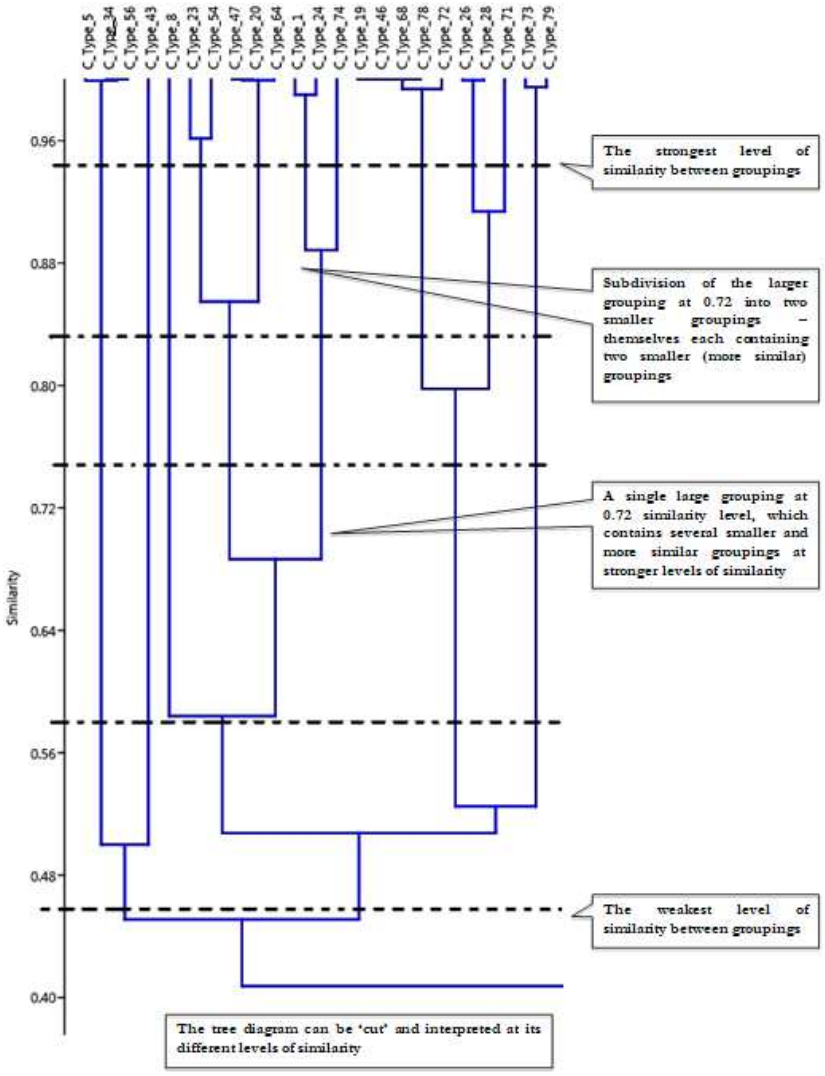


Fig. 2.14: An example of how a dendrogram can be 'cut' or interpreted. The groups above the black lines represent the groups for that particular level.

Tree diagrams display what types are worn together, and thereby what types are not worn together, throughout the Tarquinian tomb paintings. They display the articulated language of Tarquinian clothing and adornment types, its structural organisation, and they offer a basis for comprehension, but only if they are read (cut) according to their differing levels of similarity. The key principle of dress is the selection and display of different types, as it is the particular arrangement of different types that form dress groupings. To be fashionable is to be accepted and admired, and acceptance and admiration stems from this articulation, the grouping of types on a body. Yet, that is only if the correct (or rather expected) types are used in the correct (expected) composition. Furthermore, what is fashionable is also determined by what is not fashionable, and the groupings that are not seen upon an adorned body. Crucially, the different similarity levels of a tree diagram represent what is *worn* together, and what is only *seen* together, an important attribute, which makes clustering analysis an ideal tool to statistically untangle painted Tarquinian dress. Quantification of clothing and adornment type groupings similarity level determines their associative strength, which is to say the structural cohesiveness of their relationships are hierarchically represented by the tree diagrams (Aldenderfer et al, 1984: 54). Therefore, the problem of defining the number of clusters is not important because the goal of this analysis is to explore the structure of the relationships between and within tree branches (see Aldenderfer et al, 1984: 54).

Clustering analyses' greatest value is that it reduces a vast amount of data to a form that displays relationships not clear in the untreated data. Through such an approach questions may be asked of the data, the clothing and adornment type groupings, which were previously unanswerable (Grant & Hoff, 1975). Methodologically, the paintings are reduced to their dress syntax, so as to document how their dress is put together, how it builds a sartorial text, a dressed body of data, and how that text can be read, by clustering the body of data to output tree diagrams. Emphasis is now placed on how the tree diagrams are interpreted by 'cutting' them at their different similarity levels to create tree branches (Aldenderfer et al, 1984: 53). Similarity levels identify not just combinations of types, but compositions of types (Sorensen, 1997: 98). Associative strength amidst a tree branches' composite groupings is important, as it is not necessarily their frequency, but their combinations and compositions of painted dress at differing similarity levels, and their relationship with *other* content types, which is significant. By cutting tree diagrams at their different levels of similarity their grouped combinations and compositions become more visible. The different level of associative similarity strength amongst types of dress also reflects the problematic usage of dress terminology (see Eicher & Roach-Higgins, 1992: 3). Such terminology evokes, regardless of accuracy, the different strengths of associative similarity between, across, and within types of dress (see Fig. 2.15). The similarity levels of a tree diagram (dendrogram) remove the imprecise associative strength conjured through an incorrect term by displaying ac-

tual associative strengths between types of dress, and thus removing inaccuracies exuding from laden terminology.

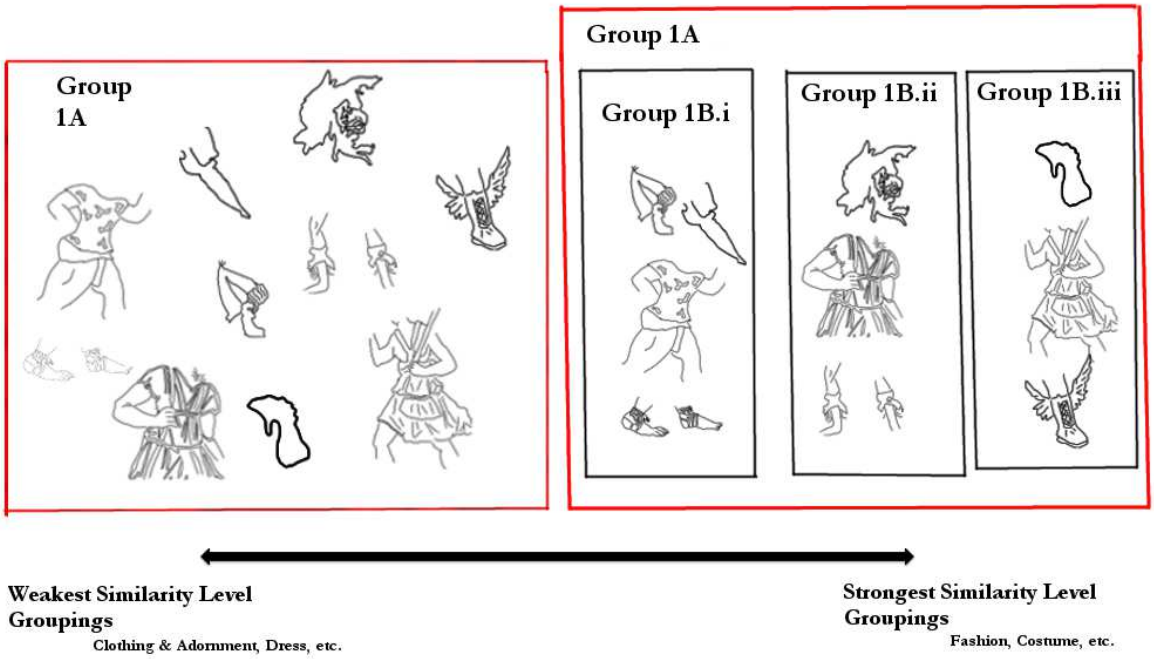


Fig. 2.15: The scale of implied associative meaning by terminology. The levels in the cluster analysis are related to this type of scale as the higher the similarity level between pieces (or groups) the stronger the association between individual types.

Tree diagram interpretation focuses on identifying the groupings of clothing and adornment types that are *seen* together, and those that are *worn* together in the tomb paintings of Tarquinia. Clothing and adornment types are worn together at stronger similarity levels, rather than just seen together in a scene with other clothing and adornment types, but not worn together, as at weaker levels of similarity. Weaker levels of similarity provide the largest groupings of clothing and adornment types, the tree branches. The stronger levels of similarity, and their groupings, are nested within the larger less similar entities, the tree branches (see Fig. 2.16). Levels of similarity between the different clothing and adornment types in a type group distinguishes between seen with types, and worn with types. Strong levels of similarity indicate the types are worn together, and a weaker similarity level indicates that they are only seen together. Similarity between paintings is measured using the clothing and adornment types as variables, and as such similar clothing and adornment types are those clustered to paintings with the same measurements i.e. those with occurrences of similar clothing and adornment type groupings. Therefore, there is a greater likelihood of the types being worn together, rather than just seen together, at the stronger levels of similarity. The *other* content types are also used as a variable to measure simi-

larity, and it is in this capacity that they act as a form of contextualisation for the clothing and adornment type groupings.

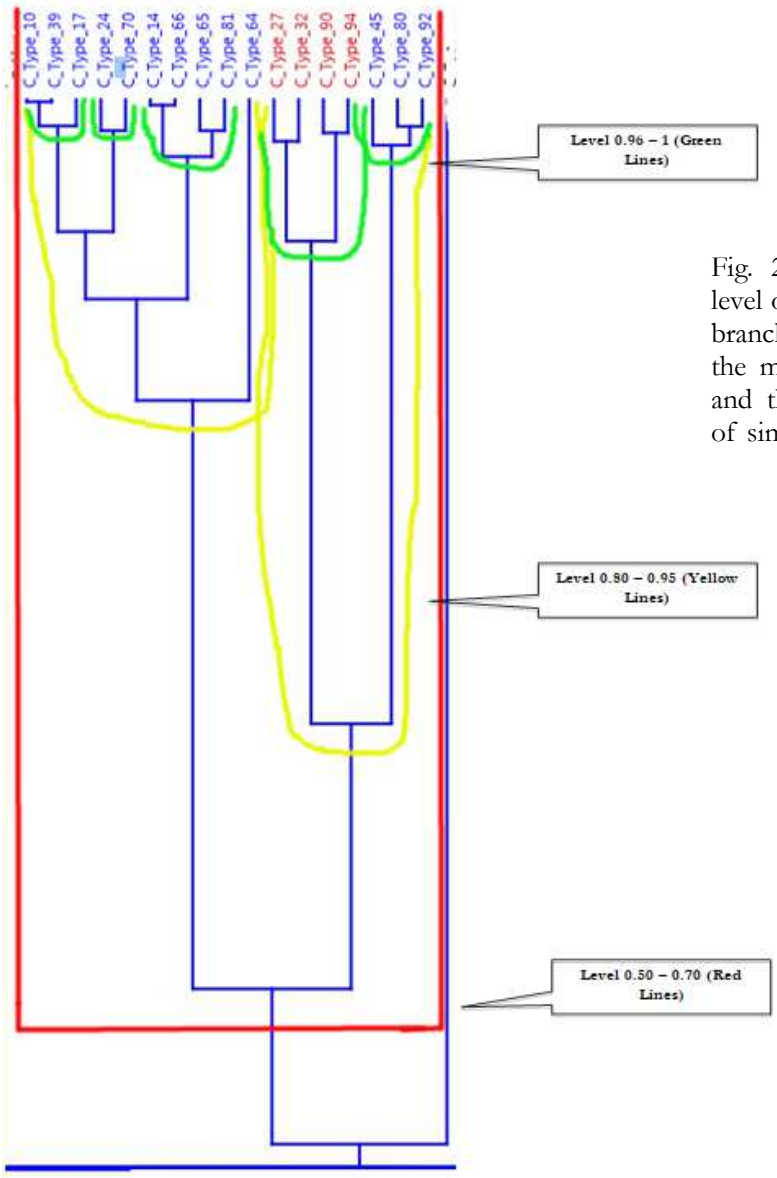


Fig. 2.16: The large weaker level of similarity groups (tree branches) are outlined by red, the middle groups by yellow, and the smaller strong levels of similarity groups in green.

Groupings are larger and more diverse in their inclusion of different clothing and adornment types, and *other* content types, at the 0.50 – 0.70 similarity level, the weakest level of similarity (see Fig. 2.16). These larger groupings contain both *seen* with clothing and adornment types and *worn* with clothing and adornment types. The types of dress presented in these larger, less similar groupings, are not worn together, such as those found in the smaller groupings at the stronger levels of similarity. They contain *combinations* of types, but *compositions* of types are significantly less well defined amongst such weaker levels of similarity. Like a tuxedo is seen with a long elegant gown at the opening night of an opera, but a tuxedo is not worn with a long elegant gown.

There is a combination of types, but not a composition of types. Compositions are clothing and adornment types that *go together* to form recognisably coherent structures. The correct *words* are used in the correct place, for example a tuxedo cannot be worn with a gown, much like the word 'shoe' cannot immediately follow the word 'hat', as 'hat shoe' is not coherent. A composition makes up a fashion, or a costume, or a uniform, or a disguise, or even a fashion faux pas. They are the groupings of dress that go together and they are identified at strong levels of similarity.

Tree branches (the largest groupings) represent the wider sartorial context, and they are given structure by their smaller composite clothing and adornment type groupings. They articulate the broadest components of dress, and their hierarchical structure progressively whittles to smaller, more strongly associated groupings in a gradual progression from weak and imprecise dress combinations to strong and more precise dress compositions; or from style, to fashion, and to costume. Discussion is structured by these larger, but weakly associated tree branches, which are composed of numerous clothing and adornment type groupings. They contain a single clothing and adornment type group from the 0.50 - 0.70 level of similarity, and one or more of the groupings from the 0.80 - 0.95 and 0.96 - 1 levels of similarity. They are the primary classifications, or clusters, of the clothing and adornment types depicted in the tomb paintings of Tarquinia. Their generation by analysing only the 'ALL' chronology clothing and adornment type components of the binary data-matrix illustrates their significant placement amidst the analyses' results.

'Cutting' a tree branch determines the similarity level of its composite groupings, which impacts their make-up. Large and weakly associated groupings are akin to a crowd of 1000 people, which is to say not a specific classification. Smaller and strongly associated groupings are akin to identifying those individuals wearing hats and scarves amidst the crowd of 1000 people, which is to say it is a more specific classification. Similarity levels are akin to the varying associative strengths inherent within dress terminology and its intuitive combinations and compositions (see Fig. 2.15; also Sorensen, 1997: 98). Therefore, clustering analysis, with its levels and groupings, is a more than suitable tool to examine the dress depicted within the tomb paintings of Tarquinia, as it too possesses such inherent levels and groupings. Furthermore, clothing and adornment type classifications are given more specificity by limiting the inclusion of variables during their analysis through the compartmentalisation of *other* content types. Data sub-sets are created when a single *other* content type category is compartmentalised, or isolated, and examined in conjunction with only clothing and adornment type variables. The different data sub-sets (each data sub-set is comprised of the clothing and adornment types and a single *other* content type category) are as follows:

Note: analysis of each data sub-set is undertaken for the 6th, 5th, 4th and 3rd/2nd centuries BC separately, and then as a singularly combined chronological block. This is achieved by examining select scenes from the data-matrix.

i. Clothing & Adornment Types (this dictates the examination of the data sub-sets as it provides the clothing and adornment type group templates — amidst their tree branches — to identify and examine in the *other* data sub-sets)

ii. Cultural Content Types & Clothing and Adornment Types

iii. Human Content Types & Clothing and Adornment Types

iv. Natural Content Types & Clothing and Adornment Types

v. Pattern Content Types & Clothing and Adornment Types

vi. Colour Content Types & Clothing and Adornment Types

The groupings of clothing and adornment types are sequentially examined alongside a single *other* content type grouping. It is possible to simultaneously examine any combination of clothing and adornment type groupings, and *other* content type groupings. However, the above is the default arrangement used to compare and contrast the different clothing and adornment type groupings throughout the different data sub-sets. This arrangement permits the clothing and adornment type groupings to first be identified. By introducing the *other* content type categories from each data-sub set later in the analysis a context of meaning is constructed through examining their provided associations, and audiences, which appear alongside the identified clothing and adornment type groupings throughout the tomb paintings.

The data set is partitioned into different data sub-sets, and each sub-set is composed of one of the five *other* content type categories, and the clothing and adornment types. Together the sub-sets compose the main body of the data-matrix, and this body is referred to as 'ALL'. The data-matrix can be analysed as a whole entity i.e. it can be examined by simultaneously analysing every data sub-set. However, the tree diagram output by such encompassing an analysis is difficult to manage, read and interpret, as it is too large to infer meaningful conclusions. Thus, it is easier, and more efficient, to analyse the data according to demarcated sub-sets. The analysis is easier to manage, as instead of a single monolithic tree diagram, there are instead seven smaller and easier to read tree diagrams per chronology (including 'ALL'). A tree diagram is output for each of the data sub-sets. A tree diagram is produced for the data-matrix as a whole too, for

comparative purposes, but again, this tree diagram is large and difficult to interpret, hence the segmentation into data sub-sets according to the *other* content type categories.

The primary groupings of clothing and adornment types (tree branches) are derived irrespective of chronology. The chronologically un-partitioned clothing and adornment type data sub-set is clustered to generate the key groupings of dress (the 'ALL' chronology). This provides the template of painted dress, a series of groupings, namely the tree branches, which are identified (or not) throughout the groupings of dress clustered by individual analysis of the 6th, 5th, 4th and 3rd/2nd century BC data (see Fig. 2.21). The method discerns continuity, change, alteration, or adaptations of dress through time, space, and place. Chronological segmentation identifies sartorial structures from the 6th, 5th, 4th, and 3rd/2nd centuries BC; structures to be compared and contrasted with the baseline template, which disregards synchrony. This is a more manageable and plausible process than attempting to examine or analyse a dendrogram output by analysing the data-matrix as a whole, or by synthesising separate patterns of dress from each chronology. By identifying and comparing the primary clothing and adornment type groupings (tree branches) at different similarity levels, through the different data sub-sets, for the different chronologies, a clearer picture of painted dress is established. Furthermore, the similarity levels (0.50 – 0.70), (0.85 – 0.95) & (0.96 – 1) have been chosen as they represented the most distinct and commonly reoccurring levels of similarity found throughout the tree diagrams in the pilot study.

Examining the 'ALL' clothing and adornment type tree diagram establishes the primary clothing and adornment type groupings embedded within their tree branches. These groupings are searched for in the *other* data sub-set tree diagrams of the different chronologies — these groups are important — it is by identifying these groupings in other tree diagrams that their association, audience, and context is discerned. The groupings of clothing and adornment types at similarity level 0.50 – 0.70 are documented (the tree branches). The groupings of clothing and adornment types at similarity level 0.85 – 0.95 are documented. The groupings of clothing and adornment types at similarity level 0.96 – 1 are documented. The groupings from the *other* data sub-sets are also documented at their different similarity levels. The *other* content type groupings contain clothing and adornment types, but they also contain only their single *other* content type category. This process creates tree lists (see Fig. 2.17). The primary 'ALL' clothing and adornment type groupings at similarity level 0.50 – 0.70 are compared to the groupings from the *other* data sub-set tree lists of the same similarity level. The clothing and adornment type groups at similarity level 0.50 – 0.70 occurring within the *other* data sub-sets tree lists of the same similarity level are recorded in tree list crossovers (see Fig. 2.18). This process is repeated for 0.85 – 0.95 similarity, and 0.96 – 1 similarity — for all chronologies. The clothing and adornment type groupings will not appear with the same group membership in the *other* tree lists throughout the

different chronologies, and similarity levels. This was expected, and the inclusions and exclusions in clothing and adornment type group membership in crossovers with *other* content type tree lists are important. Types excluded, and/or types not appearing, and type combinations or compositions changing, is significant because alterations in association, audience, or context, be it over time, or space and place, are characteristic of social dynamism.

Put simply: There is a large data-matrix. The data-matrix encompasses a chronological range from the 6th — 3rd/2nd centuries BC. This data-matrix has six sub-sets. One of these sub-sets includes only clothing and adornment types. The clothing and adornment type groups recorded at the different levels of similarity irrespective of chronology from the primary 'ALL' clothing and adornment tree diagram are used to create a tree list. The clothing and adornment groups in this tree list are searched for throughout the different data sub-sets, which have also had their groupings at the different levels of similarity recorded in their own tree list, to create a tree crossover list (for each chronology). The *other* data sub-sets are composed of the clothing and adornment type groups, and also a single *other* content type. It is by identifying the groupings from the first data sub-set, the primary clothing and adornment type groups, in these other data sub-sets, that the *other* content types are associated with particular groupings of clothing and adornment types. This process is performed for each chronological phase, as well as for the 'ALL' chronological phase. Simply put, the identified groupings of painted dress throughout the tomb paintings are utilized to determine their significant *other* content type associations. This is achieved by comparing and contrasting their different dress groupings presented through the different dendrograms (tree branches) produced by the analysis.

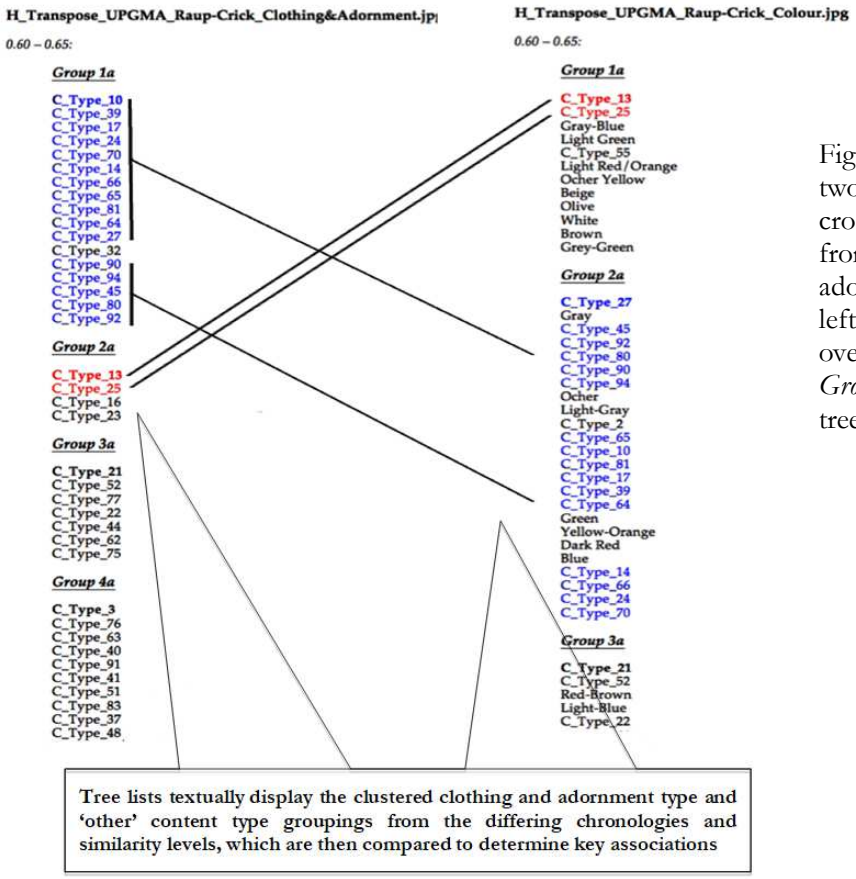


Fig. 2.17: An example of two tree lists. Note the crossover points. *Group 1a* from the clothing and adornment tree list on the left reoccurs, or crosses over, with *Group 2a* and *Group 1a* from the colour tree list on the right.

Tree Lists: contain the different groupings displayed in a tree diagram (see Fig. 2.17). The groups in the tree lists are composed of the types in a tree diagram that are grouped together for a given similarity level. They are exact, albeit textual, reproductions of the tree diagrams. They preserve the relational structure of the types as given in the tree diagram. The vertical positions of types in a group are not important. The proximity and ordinal position of types in their groups are irrelevant, but rather it is the horizontal consistency, and correspondence of proximity and ordination, across the matched groups in the different tree lists that is significant, at least for the weaker levels of similarity (this is more evident from examining the tree crossover lists; see Fig. 2.18). The horizontal correspondence between the matched groupings of the tree lists is used to demonstrate the integrity of the individual groupings. However, this form of validation is only applicable to those groups within the weakest levels of similarity. The stronger levels of similarity inherently demonstrate such consistency due to nesting within the larger groups presented by the weaker similarity levels. Matching the patterns of one or more tree lists produces the tree crossover lists. The tree lists also note the types that were not placed into groups by the clustering procedure.

Tree Crossover Lists: present a picture of what clothing and adornment type groups are associated with what *other* content type groups for a given similarity level and chronology. It also notes exceptions, such as the exclusion or inclusion of a clothing and adornment type for any given group. It combines and breaks down the tree diagrams (dendrograms) produced by the clustering procedure. The crossover list uses the groupings of clothing and adornment types from the tree lists to produce a list of crossover points for each group in a tree list for a given similarity level and chronology. This list also makes a note of the groups in the different tree lists not used in this process[8]. Below is an example of the process:

i. A group of clothing and adornment types from the primary clothing and adornment type tree diagram ('ALL' chronology) is selected from its tree list at similarity level 0.50 – 0.70 and entitled *Group 1a*.

ii. *Group 1a* is compared against groupings from the clothing and adornment type tree lists (if chronologically relevant), and it is also compared against each *other* content type tree list for the different similarity levels and chronologies.

iii. The crossover points i.e. the points where elements of *Group 1a* appear in the other groups from the different tree lists are recorded.

[8] There are clothing and adornment types and *other* content types that are not grouped. These excluded types are acknowledged, but they are not investigated.

iv. This process is repeated for each primary group of clothing and adornment types for the given similarity levels and chronologies.

v. When every primary clothing and adornment type group has been compared against the tree lists of a given similarity level and chronology a tree crossover list for this similarity level and chronology is produced.

vi. This process is repeated for each of the similarity levels, and the 'ALL', 6th, 5th, 4th, and 3rd century BC chronologies.

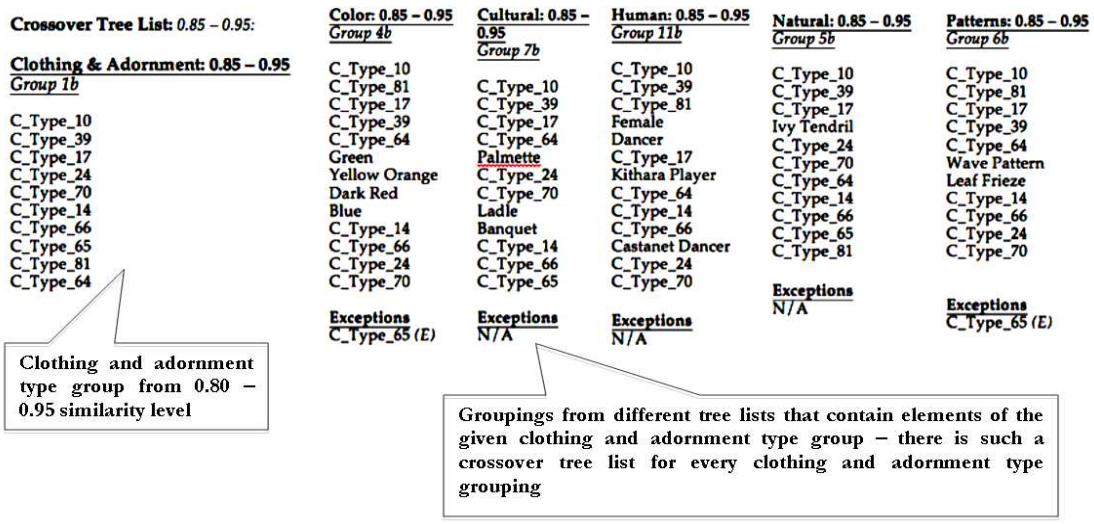


Fig. 2.18: An example of a tree crossover list.

Post tree-cutting clothing and adornment type grouping interpretation considers the individual types, and the way appearance is discursively constructed at any one time, as well as the type's materiality (Sorensen, 1997: 96). This avoids a totality mentality that unnecessarily prioritises the garment systems emphasis on 'pieces' and 'parts' (Barthes, 1973: 181). Distinction is made between textiles, the types of dress designed and cut from cloth, and the assemblages in which dress is combined (Sorensen, 1997: 96). This provides a means for investigating differing social significations, and also emphasises human interaction and conjunction (Sorensen, 1997: 96). Furthermore, where types are associated or composition created, opportunities exist for altering, adding or transforming the message that is communicated, and for conditioning its contextual response (Sorensen, 1997: 96). The lack of textile material does not prevent the application of such a phenomenological and dress theory approach, as visual representations remain subject to an 'imagined' material phenomenology (Ljunge, 2013: 140). Different levels of similarity are also important, rather than just the finalised groupings of strongly associated clothing and adornment types, as they too provide signification (Sorensen, 1997: 98). Similarity levels characterise

the structure of the dendrograms (tree diagrams) output by the clustering analysis, and they ultimately differentiate between dress, dress combinations, and dress compositions. Post-clustering interpretation contextualises the clothing and adornment type groupings of this study by re-engaging conceptions of materiality alongside communicability (see Hansen, 2004: 369).

Post tree-cutting interpretation differentiates between types, type combination, and type composition. Types convey specific meaning through their form, design, and genealogy, but also through the manner in which they are found in assemblages, and also in the ways in which they are physically organised and used together with objects (Sorensen, 1997: 98). The way in which the meaning of dress is constructed is not only dependant on the principle of types and their associations, but also on the relationship established between types, the body, space, and place. Human bodies (painted or otherwise) are dressed bodies (Entwistle, 2000: 323). They merit consideration of permanency, and of their transient, but also fixed, communication of meaning through their ability to erase or add to pre-existing bodily embellishments. Through clothing, tattooing, cosmetics or other forms of bodily adornment, conventions of dress transform the flesh into something culturally recognisable, rather than merely serving to protect modesty (Entwistle, 2000: 324). Yet, what constitutes dress varies from culture to culture, and also within a culture, since what is considered appropriate dress will vary according to the situation or occasion (Entwistle, 2000: 324). Thus, painted agglomerations of clothing and adornment types, and *other* content types, are the central point out of which social, cultural, and political contexts develop (Ribeiro, 1998: 316). Thereby, the clothing and adornment type groupings and their associated *other* content types, which impart their context, audience, and association, are both statistically quantified. Moreover, this methodology not only treats the pictorially depicted clothing and adornment types as signifiers, which accommodate a variety of transient and fixed intentions, but also subject their groupings to key phenomenological, structural, linguistic, and dress mechanisms, which contextually situate dressed bodies, and assesses the implications of their type's properties.

The clothing and adornment type groupings (tree branches) are examined 'post-tree-cutting' by:

i. Differentiating between their intentional non-verbal communicative capacities

ii. Differentiating between their types, type combination, and type composition

iii. Examining their relationship between the body, its types, its space, and place

iv. Examining their relationship between typology, associative strength, and frequency

v. Differentiating between their social, political, economic, religious, and ritual boundaries

vi. Investigating the data validation outputs impacting their group integrity

vii. Investigating changes i.e. excluded/included types amidst dress groupings, between and within the 6th, 5th, 4th, and 3rd/2nd centuries BC

viii. Separating what they mean into an analysis of how their arrangements create effect and affect, and thereby classifying their strategies 'of information exchange' (Wobst, 1977)

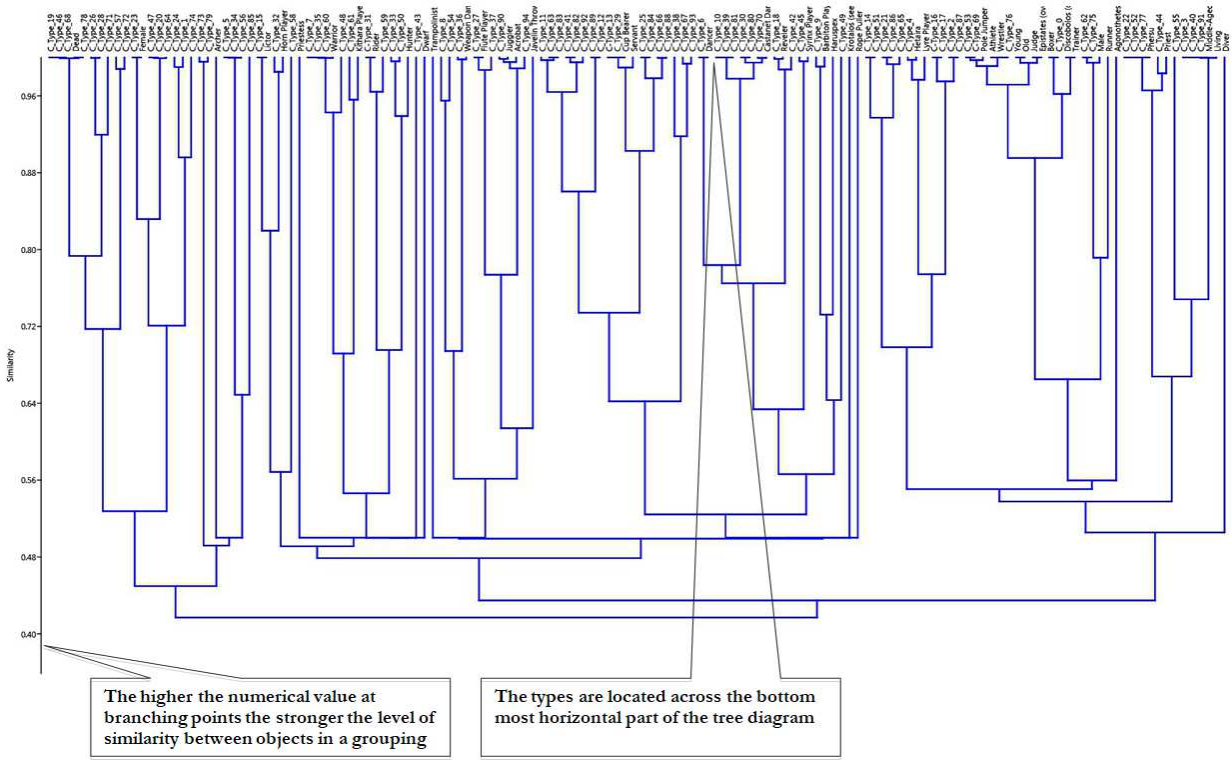


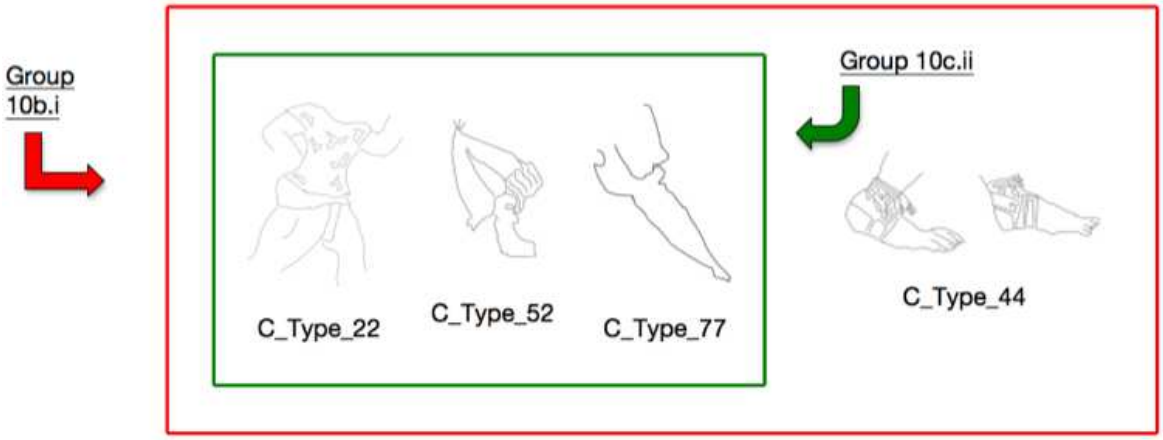
Fig. 2.19: A dendrogram of the clothing and adornment types and the human *other* types.

Investigating many of the socio-cultural aspects concerning display, identity, and interaction amidst Tarquinian tomb painting acknowledges the holistic complexity of dress (see Lee, 2015: 32). It recognises that dress's symbolic, semiotic, and quantifiable signification qualities cannot be separated from their physical, tangible, and human dimensions. Therefore, tree diagram examination recognises the significance of clustering algorithms and similarity measures as analytical tools, but also the importance of accommodating the myriad of accompanying dressed perspectives, which are not statistically quantifiable. Tree diagrams only identify the crucial components in the dynamic system of non-verbal communication found in the depictions of Tar-

quinian dress. They visualise the arrangement of clothing and adornment types that occur throughout the 96 painted Tarquinian tombs of this study (see Fig. 2.19). They also display the clothing and adornment types not grouped together, the *other* content types that the groupings occurred with, and the *other* content types that rarely or never occurred with groupings of clothing and adornment types, or *other* content types. They display the clothing and adornment types through time, who wore it, who did not wear it, where it was worn, where it was not worn, when it was worn, what it was and was not worn alongside. Furthermore, by the selection and use of the appropriate data and PAST spreadsheet it is discerned, for example, what clothing types were worn by men, what clothing types were worn by women, what clothing types were worn by mythological figures, what clothing types were worn at banquets but not processions, what clothing types were worn in sacred groves, and what clothing types were worn by boxers, etc.

2.8 - Example: Tree Branch 10

This section utilises Tree Branch 10 to demonstrate the presentation and manipulation of the data output by the hierarchical clustering analysis. It presents Tree Branch 10 (see Fig. 2.20), which is translated into a tabular and then pictorial arrangement (see Fig. 2.20). The chronological determination of the tree branch is then presented in its tabular form, which uses text strike-through and colour matching to indicate clothing and adornment type occurrence in the 6th, 5th, 4th, and 3rd centuries BC (see Fig. 2.21). The clothing and adornment type group replication table provides information on Tree Branch 10's statistical integrity across the different clustering algorithms and similarity measures (see Fig. 2.22). It assesses if the differing statistical procedures output *no match* (0%), *poor match* (25% +/-), *fair match* (50% +/-), *good match* (75% +/-), or *perfect match* (100%) when compared to Tree Branch 10's dress structures. Finally, this section presents scenes containing Tree Branch 10's groupings to emphasise the contextualised, inter-connected, and theoretically informed interpretation processes (see Fig. 2.23).



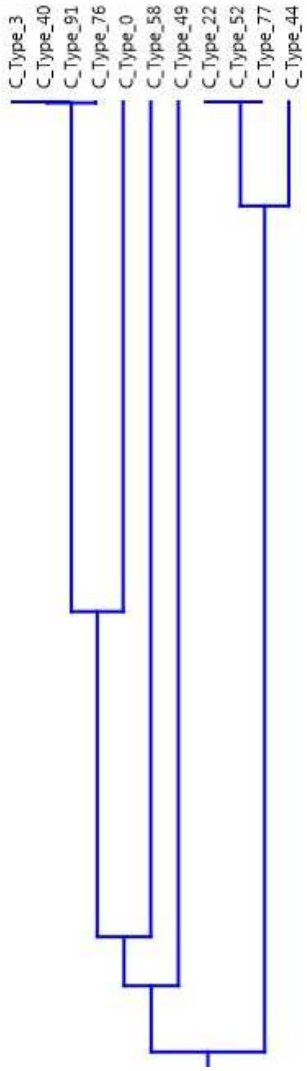


Table 31: Tree Branch 10 (see Fig. 13)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
10a	C_Type_3 C_Type_40 C_Type_91 C_Type_76 C_Type_0 C_Type_58 C_Type_49 C_Type_22 C_Type_52 C_Type_77 C_Type_44	N/A	N/A
10b.i	N/A	C_Type_22 C_Type_52 C_Type_77 C_Type_44	N/A
10c.i	N/A	N/A	C_Type_3 C_Type_40 C_Type_91 C_Type_76
10c.ii	N/A	N/A	C_Type_22 C_Type_52 C_Type_77

Fig. 2.20: **(Left)** A tree branch (*Tree Branch 10*) cut from the primary clothing and adornment type dendrogram at the 0.50 - 0.70 level of similarity — irrespective of any chronology. **(Above)** A textual breakdown of the tree branch demonstrating the different groupings across varying levels of similarity. The topmost group (*Group 10a*) is the most dissimilar grouping. The bottommost groups (*Group 10c.ii & 10c.i*) are the most similar groupings. **(Above - pg. 85)** A pictorial representation of *Group 10b.i* and *Group 10c.ii* that demonstrates a dress 'composition' — the strongest form of similarity between different types. The composition is dress, which is to say that the types are worn together in the painted tombs. They are a significant and identifiable structure, which is attributable to a specifically painted wearer, place, and space. This pattern is repeated in the 'other' content type dendrograms alongside its associated/similar cultural, human, natural, pattern, and colour 'other' content types. The 'other' content types provide contextual elucidation for the composition.

Table 33: Tree Branch 10 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
10a	C_Type_3 C_Type_40 C_Type_91 C_Type_76 C_Type_0 ~~C_Type_58~~ C_Type_49 ~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	C_Type_3 C_Type_40 ~~C_Type_91~~ C_Type_76 C_Type_0 ~~C_Type_58~~ ~~C_Type_49~~ C_Type_22 ~~C_Type_52~~ C_Type_77 ~~C_Type_44~~	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76 C_Type_0 C_Type_58 ~~C_Type_49~~ ~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76 C_Type_0 ~~C_Type_58~~ ~~C_Type_49~~ ~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ C_Type_44
10b.i	C_Type_22 C_Type_52 C_Type_77 C_Type_44	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ C_Type_44
10c.i	C_Type_3 C_Type_40 C_Type_91 C_Type_76	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ ~~C_Type_76~~	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76
10c.ii	C_Type_22 C_Type_52 C_Type_77	C_Type_22 ~~C_Type_52~~ ~~C_Type_77~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~

Fig. 2.21: Chronology table for the groupings of *Tree Branch 10*. This table displays the chronological (non)occurrences of the branches groupings through time. The modification or absence of the grouping through the different chronological phases is suggestive of the changing painted modes and forms of sartorial manipulation and communication. *Tree Branch 10* belongs to the 6th century BC, partly to the 5th century BC, and hardly at all to the 4th and 3rd centuries BC.

Table 32: Tree Branch 10 - Clothing & Adornment Type Group Replication

Similarity Measure	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Fair Match (50%)	Poor Match (25%+)	N/A	Fair Match (50%)
Jaccard	Fair Match (50%)	Poor Match (25%+)	N/A	Fair Match (50%)
Kulczynski	Poor Match (25%+)	Poor Match (25%)	N/A	Poor Match (25%+)
Ochiai	Poor Match (25%+)	Poor Match (25%+)	N/A	Good Match (75%+)
Raup-Crick	Poor Match (25%+)	No Match (0%+)	N/A	N/A
Simpson	Poor Match (25%+)	No Match (0%+)	N/A	Poor Match (25%)
Euclidean	N/A	N/A	Poor Match (25%)	N/A

Fig. 2.22: Replication table for the groupings of *Tree Branch 10*. This table displays the strength of the branch by presenting the extent of its reoccurrence when using the different similarity measures and clustering algorithms. A series of groupings that re-occur across different measures and algorithms is more robust and reliable.

Fig. 2.23: **Tree Branch 10's *scenes* -** cutting the tree diagrams, so as to contextualise, and interpret their sartorial 'text', involves consideration of the entire (albeit statistically rendered) painted picture, and their dressed bodies. The nested groupings emphasise the interwoven hierarchical relationships between the 'other' content types, and clothing and adornment types in their scenes. The otherwise disparate painted scenes depicting *Group 10b.i* are connected by the grouping of types. The connectivity of dress groupings is enhanced by the methodologies requirement to apply contemporary dress theories of non-verbal communication, place and space, and the body.

2.9 - Summary

The methodology identifies Tarquinian tomb painting's articulation of clothing and adornment types via the application of a hierarchical clustering analysis. This analysis examines relationships between objects with a large number of dressed variables to identify groupings of similar types from within a heterogeneous data-matrix. Hierarchical clustering is inherently suited to examine dress, as it too identifies small groupings carved out of a larger typology. Linguistic and picture theory also coalesce well with hierarchical clustering, as their theoretical underpinnings entwine with its statistically operative structures. PAST measures the similarity amongst the objects (painted scenes), and clusters together those that have similar attributes (clothing and adornment types). The clothing and adornment types, and *other* content types, provide the variables on which to measure the similarity of the objects. The resulting clustering solutions, the dendrograms (tree diagrams), are validated, interpreted, and contextualised by the use of tree lists, tree crossover lists, tree branches, and dress theory. The text of dress in the tomb paintings is built, read, contextualised and interpreted to determine its usefulness and significance.

Methodologically, the painted tombs of Tarquinia are re-tailored so as to decode their interwoven structural groupings of dress. The methodology facilitates a structuralist analysis, an examination of dress structures, and how they fit into their painted socio-historic contexts (see Conkey, 1989: 152). It identifies the hypothesised recognisable, coherent and significant organisational groupings of dress that constitute intentional forms of non-verbal communication. Arguing from the structures of tree diagrams, and rearranged data and resemblance matrices to satisfy this principle hypothesis, as well as validating and testing this hypothesis, and creating new hypothesises too, exemplifies the underlying hypothetico-deductive nature of the method (see Searles, 1968). Its success is determined by its ability to identify painted dress 'assemblages used to modify and/or supplement' bodily depiction (see Eicher & Roach-Higgins, 1992: 1), and the extent to which the pictorial forms of painted dress constitute a language, which was deliberately manipulated and wielded. Therefore, the tree diagrams must contain groupings describable as painted Tarquinian dress, as that is their predicted organisational structure. 'Dress' is defined as all direct modifications to the body itself, and all three-dimensional supplements added to it' (Eicher & Roach-Higgins, 1992: 1). Moreover, its success is also dependant on the ability of post-clustering examination to interpret and contextualise the identified structures of painted dress. It must elucidate clothing and adornment types as signifiers, which when grouped together signify their relationships, and importantly, when placed into their tomb painted context indicate means and modes of manipulating expression and arranging pictorial signification.

This methodology demonstrates how Tarquinian tomb paintings have been sartorially divided, and how the varying signifying units of their sartorial *text* have been identified (Eagleton, 1983:

96). It seeks deeper structures, not apparent on the surface, or revealed by more traditional modes of analysis (Eagleton, 1983: 96). Yet, it does so without denying any obvious meaning of the art or its imagery (Eagleton, 1983: 96). It overcomes criticisms levied at such structuralist forms of thought and method, as questions of meaning are not displaced from the individual boundaries of particular images to the relationship of elements amongst images, as both individual types and their myriad of painted relationships are engaged. Clothing and adornment types do most often only have meaning by virtue of their relations to one another, but this is a core element of the 'fashion system' (Barthes, 1973: 27), and such relations only form the starting point, as they are returned to their materiality and context at later interpretative stages (see Eagleton, 1983: 96). Methodologically, it seeks not just the structure of clothing and adornment types amidst Tarquinian tomb painting, but also their 'referential context of social action' (Hodder, 1982: 8). *Other* content types are not bracketed off or separated from the analysis, but are instead directly incorporated. Therefore, this methodology is able to identify specific-purpose classifications (Romesburg, 1984: 54) as the different groupings (or classifications) of clothing and adornment types are related to specific variables; namely the *other* content types. There is a sense in which one can say that the content of the art is its structure, and in a way, the imagery is about itself (Eagleton, 1983: 96). However, if the imagery is about itself then it is an abundant source of information, as it is about its artist, its culture, and its place in the context of Tarquinian society. Its structure, grouping, or patterning is thus a significant product impacting time, place, ecology, context, as well as actors, intentions, reasons, and why particular structural painted dress groupings appealed to particular makers, users, or viewers (Eagleton, 1983: 96).

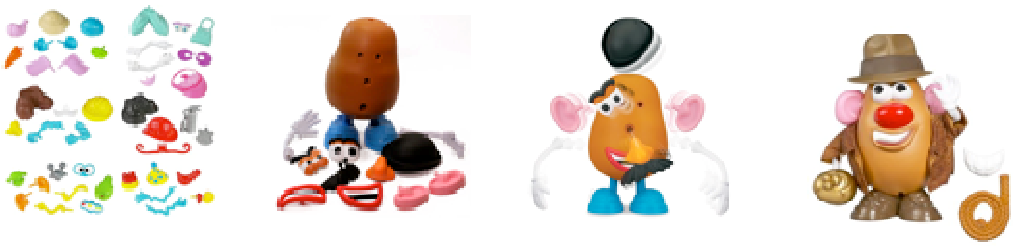


Fig. 2.24: Mr. Potato Head is a surprising yet useful analogy who helps to display the core concept of this methodology. That is to say the concept of communicative and meaningful groupings of different clothing and adornment types.

Mr. Potato Head is a surprising but useful example to conceptualise this study. The cluster analysis of Tarquinian tomb paintings is similar to putting Mr. Potato Head back together by using his various different types of dress. Mr. Potato Head has a wide variety of pieces, or types, of clothing and adornment, which can be arranged into varying combinations. Yet, his sartorial

dictionary is limited to his available typology. However, his dress compositions that 'make sense' are those culturally recognisable to the viewer. To create a recognisable and coherent Mr. Potato Head he must be dressed in such a way that 'makes sense' to the individual doing the dressing. The combination of types chosen to dress Mr. Potato Head by an individual will also be recognisable by other individuals of the same socio-cultural background. The dresser of Mr. Potato Head presents, or creates, the style, or code, according to their inherent cultural background. Mr. Potato Head dressed bizarrely or strangely, namely a Mr. Potato Head that does not make sense, stands out as such to a viewer. It stands out as surely as if his ears and feet were swapped around, as well as if his eyes and nose switched places. The composition, or grouping, of his clothing and adornment types would not make sense, it would communicate no meaning or significance, and it would provide no enjoyment or meaning beyond the initial hilarity of having dressed Mr. Potato Head in a so peculiar and nonsensical manner (see Fig. 2.24). Mr. Potato Head provides reassurance that dress goes together in specific, recognisable, and organised groupings (see Fig. 2.25). To identify similarly structured organisations of dress within Tarquinian tomb paintings it is necessary to apply a hierarchical clustering analysis.

Fig. 2.25: Mr. Potato Head dressed according to culturally specific dress codes, which do not require clustering analysis to decipher.

Dress is made up of signs bearing meaning, signifying beyond itself, and is from a structuralist perspective, a form of text, something to be read and decoded, its grammar and syntax revealed (see Tilley, 2006: 7). Dress educates the senses by structuring the means through which the world is comprehended (Gosden, 2001: 163). It is almost a 'prosthetic extensions of the self' and affects people in ways that would not happen if it were not there (Gosden, 2001: 164). The forms of dress, its effect, its genealogy and its source dictate its capacity to affect people (Gosden, 2005: 193). Dress intervenes and makes a difference through altering the minds of others (see Tilley, 2006: 7). It can frighten or dazzle (see Gell, 1998). Its forms work together to communicate 'magical and aesthetic effects' (see Coote & Shelton, 1992: 9) and to retain symbolic values (see Jannot, 2009). Concentration must be placed on the systems of dress, on the sets of social relations attached to its various forms, and its formal qualities, which in conjunction were aimed at effecting resolution to a range of significant issues (Gosden, 2001: 165; see Miller,

1998: 15). Dress systems possess a recognisable set of forms and styles that influence its effect and affect (Gosden, 2005: 195); albeit, 'things of even the seemingly most fixed kind have the potential to mean different things for different people' (Miller, 1998: 10). Therefore, it is vital to examine the construction of particular systems of dress in past contexts, this includes its structure (see Strauss, 1983), and its specific construction of selves and culture (Meskell, 2005: 1). To embrace an over-arching 'Etruscan dress' is anti-historical, and so this study identifies and thoroughly engages the Tarquinian tomb painting dialectic of dress by identifying, presenting, and examining its structures – the tree branches.

3. Data Presentation

3.1 - Introduction

This chapter presents the results of the hierarchical clustering analysis of clothing and adornment types from the painted tombs at Tarquinia. It presents the key data from the analysis and is supplemented by appendix A, which contains the full data from the analysis as well as more detailed descriptions of the data. The current chapter presents and describes the groupings of clothing and adornment types, but it does not discuss their significance or attempt to put them into context. The proceeding chapter 4 and chapter 5 interpret the results, understanding the presented groupings of words and their sentences, by investigating the relationship between their associative strength, frequency, and typology. The analysis of the painted tombs produced hierarchical groupings of the clothing and adornment types. The groupings are visible as the individual tree branches of a dendrogram (see Fig. 3.1). The tree branches identify the combinations, compositions, styles, and fashions of the dress depicted in the Tarquinian tomb paintings. They are the significant classifications, or clusters, of the clothing and adornment types depicted in the tomb paintings of Tarquinia.

Individual tree branches feature a single clothing and adornment type group from the 0.50 - 0.70 level of similarity, and one or more of the groupings from the 0.80 - 0.95 and 0.96 - 1 levels of similarity. The structure and relationships of each tree branch are presented in Fig. 3.2 and Fig. 3.3. The branches illustrate the relationships and interactions between the clothing and adornment types by presenting the different groupings of types within their nested hierarchy of similarity. The tree branches also present the associations of the clothing and adornment type groups with their *other* content types, such as Phersu, Vanth, Charun, chariot, weapon, and four-dot rose pattern, etc. (see Fig. 3.15 - 3.20). The groupings of weak similarity (0.50 - 0.70) are positioned at the top of the tree branch hierarchy, and are designated with a letter 'a'. The groupings of medium similarity (0.80 - 0.95) are positioned in the middle of the hierarchy and are designated with a letter 'b'. The groupings of strong similarity (0.96 - 1) are positioned at the bottom of the hierarchy and are designated with a letter 'c'. For example, Tree Branch 2 is hierarchically composed of Group 2a (0.50 - 0.70), which subsumes Group 2b.i and Group 2b.ii (0.80 - 0.95), which subsume Group 2c.i and Group 2c.ii (0.96 - 1).

The 0.50 - 0.70 similarity level of the ALL chronology clothing and adornment deondrogram is characterised by large groups that include a wide variety of different clothing and adornment types (see Table. 1). This level represents the weakest form of the classifications identified by the clustering analysis. It presents the top level of a tree branch. The groups of this level are non-specific and represent the full assemblage of a tree branch, rather than its smaller composi-

tions, styles, or fashions presented at the stronger levels of similarity. **Note**: C_Type_N = abbreviation of Clothing & Adornment Type <Number>.

Table 1: Clothing and Adornment Type Groups: 0.50 - 0.70

Group	Clothing & Adornment Types
1a (Tree Branch 1)	C_Type_5, C_Type_34, C_Type_56, & C_Type_43
2a (Tree Branch 2)	C_Type_8, C_Type_23, C_Type_54, C_Type_47, C_Type_20, C_Type_64, C_Type_1, C_Type_24, & C_Type_74
3a (Tree Branch 3)	C_Type_19, C_Type_46, C_Type_68, C_Type_78, C_Type_72, C_Type_26, C_Type_28, C_Type_71, C_Type_73, & C_Type_79
4a (Tree Branch 4)	C_Type_6, C_Type_10, C_Type_51, C_Type_85, C_Type_9, C_Type_30, C_Type_80, C_Type_39, C_Type_81, C_Type_18, C_Type_70, & C_Type_42
5a (Tree Branch 5)	C_Type_14, C_Type_86, C_Type_65, C_Type_21, & C_Type_55
6a (Tree Branch 6)	C_Type_27, C_Type_45, C_Type_90, & C_Type_94
7a (Tree Branch 7)	C_Type_7, C_Type_35, C_Type_60, C_Type_36, C_Type_37, C_Type_48, & C_Type_12
8a (Tree Branch 8)	C_Type_11, C_Type_63, C_Type_83, C_Type_41, C_Type_82, C_Type_92, C_Type_89, C_Type_13, C_Type_29, C_Type_88, C_Type_66, C_Type_25, C_Type_84, C_Type_15, C_Type_38, C_Type_67, & C_Type_93
9a (Tree Branch 9	C_Type_31, C_Type_59, C_Type_33, C_Type_50, C_Type_57, C_Type_62, & C_Type_75
10a (Tree Branch 10)	C_Type_3, C_Type_40, C_Type_91, C_Type_76, C_Type_0, C_Type_58, C_Type_49, C_Type_22, C_Type_52, C_Type_77, & C_Type_44
11a (Tree Branch 11)	C_Type_2 C_Type_87, C_Type_16, C_Type_17, C_Type_4, C_Type_32, C_Type_53, & C_Type_69

The clothing and adornment type groupings of similarity level 0.80 - 0.95 are positioned in the middle of a tree branch's hierarchy. This level of similarity is characterised by smaller groupings that provide a stronger association of clothing and adornment types, and consequently make it possible to examine the associations, context, and audience of particular clothing and adornment type arrangements. At this level of similarity the types begin to transform from groups of combinations to groups of compositions (as per Sorensen, 1997: 98). As compositions the groupings go together and make more sense from the perspective of clothing and adornment theory (Barthes, 1973: 181). The clothing and adornment type groups of the ALL chronology clothing and adornment dendrogram 0.80 - 0.95 level of similarity are presented below (see Table. 2).

Table 2: Clothing and Adornment Type Groups: 0.80 - 0.95	
Group	**Clothing & Adornment Types**
2b.i	C_Type_23, C_Type_54, C_Type_47, C_Type_20, & C_Type_64
2b.ii	C_Type_1, C_Type_24, & C_Type_74
3b.i	C_Type_19, C_Type_46, C_Type_68, C_Type_78, C_Type_72, C_Type_26, C_Type_28, & C_Type_71
4b.i	C_Type_6, C_Type_10, C_Type_51, & C_Type_85
4b.ii	C_Type_9, C_Type_30, C_Type_80, C_Type_39, C_Type_81, C_Type_18, C_Type_70, & C_Type_42
8b.i	C_Type_11, C_Type_63, C_Type_83, C_Type_41, C_Type_82, C_Type_92, & C_Type_89
8b.ii	C_Type_15, C_Type_38, C_Type_67, & C_Type_93
9b.i	C_Type_31, C_Type_59, C_Type_33, & C_Type_50
9b.ii	C_Type_57, C_Type_62, & C_Type_75
10b.i	C_Type_22, C_Type_52, C_Type_77, & C_Type_44
11b.i	C_Type_2, C_Type_87, C_Type_16, C_Type_17, & C_Type_4

The groupings of similarity level 0.96 - 1 are positioned at the bottom of each tree branch hierarchy. This is the strongest level of similarity. The groups of this level form compositions (as per Sorensen, 1997: 98), and they have a stronger association and refine how the clothing and adornment types go together in the larger groupings found in the weaker similarity levels. The smaller groups of this level provide a stronger measure of *other* content type and clothing and adornment type association, context, and audience attribution. The clothing and adornment type groups of the ALL chronology clothing and adornment dendrogram 0.96 - 1 level of similarity are presented below (see Table. 3).

Table 3: Clothing & Adornment Type Groups: 0.96 - 1	
Group	**Clothing & Adornment Types**
1c.i	C_Type_5, C_Type_34, & C_Type_56

Table 3: Clothing & Adornment Type Groups: 0.96 - 1

Group	Clothing & Adornment Types
2c.i	C_Type_47, C_Type_20, & C_Type_64
2c.ii	C_Type_1 & C_Type_24
3c.i	C_Type_19, C_Type_46, C_Type_68, C_Type_78, & C_Type_72
3c.ii	C_Type_26 & C_Type_28
3c.iii	C_Type_73, & C_Type_79
4c.i	C_Type_6, C_Type_10, & C_Type_51
4c.ii	C_Type_9, C_Type_30, C_Type_80, C_Type_39, & C_Type_81
4c.iii	C_Type_18, C_Type_70, & C_Type_42
5c.i	C_Type_14, C_Type_86, C_Type_65, & C_Type_21
6c.i	C_Type_27 & C_Type_45
6c.ii	C_Type_90 & C_Type_94
7c.i	C_Type_7, C_Type_35, C_Type_60, & C_Type_36
7c.ii	C_Type_37, C_Type_48, & C_Type_12
8c.i	C_Type_11, C_Type_63, & C_Type_83
8c.ii	C_Type_41, C_Type_82, C_Type_92, & C_Type_89
8c.iii	C_Type_13, C_Type_29, C_Type_88, & C_Type_66
8c.iv	C_Type_25 & C_Type_84
8c.v	C_Type_15 & C_Type_38
8c.vi	C_Type_67 & C_Type_93
9c.i	C_Type_31 & C_Type_59
9c.ii	C_Type_33 & C_Type_50
9c.iii	C_Type_62 & C_Type_75
10c.i	C_Type_3, C_Type_40, C_Type_91, & C_Type_76
10c.ii	C_Type_22, C_Type_52, & C_Type_77

Table 3: Clothing & Adornment Type Groups: 0.96 - 1	
Group	**Clothing & Adornment Types**
11c.i	C_Type_2, C_Type_87, C_Type_16, & C_Type_17
11c.ii	C_Type_32, C_Type_53, & C_Type_69

This chapter presents each of the 11 tree branches, or rather each of the 11 clothing and adornment type classifications, identified by this study. The clothing and adornment type groups that form each branch are presented from the top of their hierarchy (0.50 - 0.70) to the bottom of their hierarchy (0.96 - 1), so from their weakest to their strongest levels of similarity. The replication validation method is presented for each tree branch to display the clusters robustness across the different similarity measures and clustering algorithms. The *other* content type associations of each tree branch are presented where significant, otherwise they can be found in appendix A. The alteration of each tree branch through the 6th to the 3rd centuries BC is commented upon where relevant to convey diachronic integrity, but the chronological phases for each clothing and adornment type tree branch are displayed in Fig. 3.21 - 3.24, and in appendix A for the *other* tree branches. The outcome of each validation procedure, outlined in the methodology chapter, is also presented in the penultimate section. The dendrograms of each *other* content type category, and the clothing and adornment type category, output by the UPGMA clustering algorithm (Sokal & Michener, 1958) and Raup-Crick similarity measure (Raup & Crick, 1979) are also presented (see Fig. 3.1 & Fig. 3.16 - 3.20). The dendrograms produced by the various similarity measures and clustering algorithms can be found in appendix A. The tree branch structure diagram, and the tree branch crossover diagram, is presented (see Fig. 3.2 & Fig. 3.3), and so too are the pictorial forms of each tree branch (see Fig. 3.4 - 3.14). The tree branches presented in this chapter are the statistically identified structures of painted dress. They provide a basis for elucidating the thoughts, decisions, actions, meanings, affects, and effects manifested and recognised through painted sartorial arrangement (see Dunnell, 1971: 74). They designate the significant and deliberately organised forms of intentionally comprehensible non-verbal communication through painted dress (see Adams & Adams, 1991: 223).

3.2 - Tree Branch 1

Tree Branch 1 (see Table. 4) comprises a cuirass or torso protecting armour (C_Type_5), a cloak or paludamentum (C_Type_34), a helmet (C_Type_56), and a boot (C_Type_43). This grouping of clothing and adornment types, with the exception of C_Type_34, occurs only in the 4th century BC in the *Tomb of the Giglioli (*see Fig. 5.2, 5.3, & 5.4*)*. This tree branch is split between

C_Type_5, C_Type_34, and C_Type_56, and C_Type_43. The detailed depiction of C_Type_5, C_Type_34, and C_Type_56, in contrast to C_Type_43, is impressive, particularly on the folds of the fabric on the cloak, the cheekbone guards on the helmet, and the carefully sculpted pectoral and abdomen area of the cuirass. This detail suggests a significant intent underlying their depiction. Intriguingly, these clothing and adornment types are divorced from their expected context of a body, as the types are not *worn* but are instead displayed. There are significant associations between the armour, weapon frieze, greaves, painted nail, paludamentum, shield, sword, and javelin. The emphasis placed on themes of display and communication through the combination of clothing and adornment types is a reoccurring theme throughout the 11 tree branches, but in no other branch is this theme as brazen as it is in Tree Branch 1. The clothing and adornment types of this branch are literally hung-up as items of display, rather than worn as dress, on the painted walls of the *Tomb of the Giglioli*. There is an intentional and specific display, manipulation, and use of clothing and adornment types as a form of non-verbal communication, even without a body, to elicit a desired effect on or from a viewer (as per Gell, 1998). This theme plays a pivotal role in the interpretation of this tree branch, as it dishonestly wields disembodied dress as a direct form of non-verbal communication.

Table 4: Tree Branch 1 (see Fig. 3.4)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
1a	C_Type_5 C_Type_34 C_Type_56 C_Type_43	N/A	N/A
1c.i	N/A	N/A	C_Type_5 C_Type_34 C_Type_56

Table 5: Tree Branch 1 - Clothing & Adornment Type Group Replication

Similarity Measures	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Good Match (75%)	Good Match (75%)	N/A	Good Match (75%)
Jaccard	Good Match (75%)	Good Match (75%)	N/A	Good Match (75%)
Kulczynski	Perfect Match (100%)	Good Match (75%)	N/A	Good Match (75%)
Ochiai	Good Match (75%)	Good Match (75%)	N/A	Good Match (75%)

Table 5: Tree Branch 1 - Clothing & Adornment Type Group Replication				
Similarity Measures	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Raup-Crick	Good Match (75%)	Good Match (75%)	N/A	N/A
Simpson	Perfect Match (100%)	Good Match (75%)	N/A	Good Match (75%)
Euclidean	N/A	N/A	Good Match (75%)	N/A

Table 6: Tree Branch 1 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
1a	~~C_Type_5~~ ~~C_Type_34~~ ~~C_Type_56~~ ~~C_Type_43~~	~~C_Type_5~~ C_Type_34 ~~C_Type_56~~ ~~C_Type_43~~	C_Type_5 C_Type_34 C_Type_56 C_Type_43	~~C_Type_5~~ ~~C_Type_34~~ ~~C_Type_56~~ ~~C_Type_43~~
1c.i	~~C_Type_5~~ ~~C_Type_34~~ ~~C_Type_56~~	~~C_Type_5~~ ~~C_Type_34~~ ~~C_Type_56~~	C_Type_5 C_Type_34 C_Type_56	~~C_Type_5~~ ~~C_Type_34~~ ~~C_Type_56~~

3.3 - Tree Branch 2

Tree Branch 2 (see Table. 7) is composed of C_Type_8, a wrap covering everything below the waist, C_Type_23, a combination of chiton and hooded cloak with a diadem, C_Type_54, the hood of a cloak, C_Type_47, a soft-laced ragged boot, and C_Type_20, a garment that leaves the chest bare with cross-straps across the breast and a rolled short chiton. Furthermore, this branch is also composed of C_Type_64, medium length curly hair, C_Type_1, a shorter waist wrap, C_Type_24, a sleeveless chiton, and C_Type_74, a distinctive hairstyle. The patterns of dress presented in this tree branch are mostly found in the 3rd century BC. The key associations of this tree branch are Vanth, Charun, female demon, journey to the underworld, staff, male demon, prosthesis, battle scene, ibex, tripod, dead, female and ship. Group 2b.i, 2b.ii, and 2c.i are of particular interest, as their forms of dress delineate its role in creating and projecting otherworldly, social, political, and economic boundaries.

The distinct and unusual attire of Vanth and Charun act as crucial elements of segregation. Their *difference* in clothing and adornment type signifies the adornment of boundaries, such as that between the natural and the supernatural. For example, the properties of C_Type_20, cross-straps across the breast and a rolled short chiton that leaves the chest bare, is the opposite of C_Type_23, a conventional and expected combination of chiton and hooded cloak with a

diadem. The unusual distinctiveness of C_Type_20 serves to express a boundary between life, death and the afterlife via its departure from typological norms. This distinct opposition of pieces permits specific attributions amongst the myriad of possible *other* content type associations. The distinctiveness, difference, or mundane clothing and adornment types dictates their prominence as identifying markers, or signifiers, as their constructional properties effect considerations of association, context, and audience. This is methodologically mandated by the phenomenological need to consider *what* clothing and adornment means through its constructional properties, when on a body, in a space, and occupying a place. This theme of distinctiveness delineating boundaries, and bodily affect, significantly impacts the interpretation of Tree Branch 2's groupings, as well as those of the other tree branches, which have been statistically identified as 'put together' (Barthes, 1973: 181).

Table 7: Tree Branch 2 (see Fig. 3.5)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
2a	C_Type_8 C_Type_23 C_Type_54 C_Type_47 C_Type_20 C_Type_64 C_Type_1 C_Type_24 C_Type_74	N/A	N/A
2b.i	N/A	C_Type_23 C_Type_54 C_Type_47 C_Type_20 C_Type_64	N/A
2b.ii	N/A	C_Type_1 C_Type_24 C_Type_74	N/A
2c.i	N/A	N/A	C_Type_47 C_Type_20 C_Type_64
2c.ii	N/A	N/A	C_Type_1 C_Type_24

Table 8: Tree Branch 2 - Clothing & Adornment Type Group Replication				
Similarity Measures	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Dice	Perfect Match (100%)	Poor Match (25%)	N/A	Fair Match (50%+)
Jaccard	Perfect Match (100%)	No Match (0%+)	N/A	Fair Match (50%+)
Kulczynski	Good Match (75%+)	Fair Match (50%)	N/A	Good Match (75%+)
Ochiai	Good Match (75%+)	Fair Match (50%+)	N/A	Good Match (75%+)
Raup-Crick	Good Match (75%+)	Fair Match (50%)	N/A	N/A
Simpson	Good Match (75%)	Fair Match (50%+)	N/A	Poor Match (25%+)
Euclidean	N/A	N/A	Fair Match (50%)	N/A

Table 9: Tree Branch 2 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
2a	~~C_Type_8~~ C_Type_23 C_Type_54 ~~C_Type_47~~ ~~C_Type_20~~ C_Type_64 C_Type_1 C_Type_24 ~~C_Type_74~~	C_Type_8 C_Type_23 C_Type_54 ~~C_Type_47~~ ~~C_Type_20~~ C_Type_64 C_Type_1 C_Type_24 ~~C_Type_74~~	C_Type_8 C_Type_23 ~~C_Type_54~~ ~~C_Type_47~~ ~~C_Type_20~~ C_Type_64 C_Type_1 ~~C_Type_24~~ ~~C_Type_74~~	~~C_Type_8~~ C_Type_23 C_Type_54 C_Type_47 C_Type_20 C_Type_64 C_Type_1 C_Type_24 ~~C_Type_74~~
2b.i	C_Type_23 C_Type_54 ~~C_Type_47~~ ~~C_Type_20~~ C_Type_64	C_Type_23 C_Type_54 ~~C_Type_47~~ ~~C_Type_20~~ C_Type_64	C_Type_23 ~~C_Type_54~~ ~~C_Type_47~~ ~~C_Type_20~~ C_Type_64	C_Type_23 C_Type_54 C_Type_47 C_Type_20 C_Type_64
2b.ii	C_Type_1 C_Type_24 ~~C_Type_74~~	C_Type_1 C_Type_24 ~~C_Type_74~~	C_Type_1 ~~C_Type_24~~ ~~C_Type_74~~	C_Type_1 C_Type_24 ~~C_Type_74~~
2c.i	~~C_Type_47~~ ~~C_Type_20~~ C_Type_64	~~C_Type_47~~ ~~C_Type_20~~ C_Type_64	~~C_Type_47~~ ~~C_Type_20~~ C_Type_64	C_Type_47 C_Type_20 C_Type_64

Table 9: Tree Branch 2 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
2c.ii	C_Type_1 C_Type_24	C_Type_1 C_Type_24	C_Type_1 ~~C_Type_24~~	C_Type_1 C_Type_24

3.4 - Tree Branch 3

Tree branch 3 (see Table. 10) identifies C_Type_19, a short chiton, C_Type_46, a pair of fur covered boots, C_Type_68 and C_Type_78, examples of a distinctive hairstyle and a distinctive beard, and C_Type_72, a hair style incorporating snakes. C_Type_26 is an exomis, joined at the left shoulder. C_Type_28 is another version of C_Type_19 worn tighter around the waist and with longer sleeves, C_Type_71 is another example of a distinctive hairstyle, C_Type_73 is yet another distinctive hairstyle, and C_Type_79 is yet another distinctive beard. This pattern of dress is found in the 3rd century BC, but it does appear, albeit slightly modified in its form, in the 5th and 4th centuries BC. This branch is associated with Vanth, Charun, female demon, journey to the underworld, staff, male demon, prosthesis, battle scene, ibex, tripod, ship, dead and female. This group is also associated, as is Tree Branch 2, with false door, altar, cult image, and purification sacrifice. Furthermore, it is too associated with snakes, rocks, rocky landscapes, and tendrils or garlands. Tree Branch 3 interacts with some of the same *other* content types and clothing and adornment types as Tree Branch 2. Similarly, this branch also adorns the boundary between the natural and the supernatural, and accentuates the liminal by presenting distinct garments and modes of adornment.

Compared to the majority of clothing and adornment types depicted throughout the tomb paintings of Tarquinia the properties of Tree Branch 3's dress, similarly to those presented by Tree Branch 2, are distinct in their constriction and decoration. They too connect to themes of death and the afterlife. Tree Branch 2 and Tree Branch 3 present the attire of the deceased, as well as the attire of the demons, which would escort, protect or harass them on their journey to the Underworld (Ridgway, 2000: 312; Weber-Lehmann, 1998; Krauskopf, 2006: 67; Terpening, 1985). They adorn those at the boundary between life and death, the natural and the supernatural. Their distinct opposition of pieces permit specific attributions amongst the myriad of possible *other* content type associations. This reflects a key trend of distinct types contrasted with mundane types, which is most prominent amongst the clothing and adornment types of Tree Branch 2 and Tree Branch 3. This trend, created by the physical properties of the clothing and adornment types, is present throughout the other tree branches, but it is most apparent amidst Tree Branch 2 and Tree Branch 3. Distinct properties of dress versus mundane, common, or expected properties of dress, is a significant component of interpretation. This component

gives meaning to what has been clustered together, type by type, or word by word. It thematically dissects the groupings provided sequences, or sentences (as per Barthes, 1973: 179), according to conceptions of materiality (see Keane, 2005: 183) and communicability (see Hansen, 2004: 369).

Table 10: Tree Branch 3 (see Fig. 3.6)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
3a	C_Type_19 C_Type_46 C_Type_68 C_Type_78 C_Type_72 C_Type_26 C_Type_28 C_Type_71 C_Type_73 C_Type_79	N/A	N/A
3b.i	N/A	C_Type_19 C_Type_46 C_Type_68 C_Type_78 C_Type_72 C_Type_26 C_Type_28 C_Type_71	N/A
3c.i	N/A	N/A	C_Type_19 C_Type_46 C_Type_68 C_Type_78 C_Type_72
3c.ii	N/A	N/A	C_Type_26 C_Type_28
3c.iii	N/A	N/A	C_Type_73 C_Type_79

Table 11: Tree Branch 3 - Clothing & Adornment Type Group Replication

Similarity Measures	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Good Match (75%)	Fair Match (50%)	N/A	Good Match (75%)
Jaccard	Good Match (75%)	Fair Match (50%)	N/A	Good Match (75%)
Kulczynski	Good Match (75%+)	Good Match (75%)	N/A	Good Match (75%)

Table 11: Tree Branch 3 - Clothing & Adornment Type Group Replication				
Similarity Measures	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Ochiai	Perfect Match (100%)	Fair Match (50%)	N/A	Good Match (75%)
Raup-Crick	Good Match (75%+)	Fair Match (50%)	N/A	N/A
Simpson	Good Match (75%+)	Poor Match (25%)	N/A	Perfect Match (100%)
Euclidean	N/A	N/A	Poor Match (25%+)	N/A

Table 12: Tree Branch 3 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
3a	~~C_Type_19~~ ~~C_Type_46~~ ~~C_Type_68~~ ~~C_Type_78~~ ~~C_Type_72~~ ~~C_Type_26~~ ~~C_Type_28~~ ~~C_Type_71~~ ~~C_Type_73~~ ~~C_Type_79~~	C_Type_19 ~~C_Type_46~~ C_Type_68 C_Type_78 ~~C_Type_72~~ C_Type_26 C_Type_28 C_Type_71 ~~C_Type_73~~ ~~C_Type_79~~	C_Type_19 ~~C_Type_46~~ ~~C_Type_68~~ C_Type_78 C_Type_72 ~~C_Type_26~~ C_Type_28 C_Type_71 C_Type_73 C_Type_79	C_Type_19 C_Type_46 C_Type_68 C_Type_78 C_Type_72 C_Type_26* C_Type_28 C_Type_71 ~~C_Type_73~~ ~~C_Type_79~~
3b.i	~~C_Type_19~~ ~~C_Type_46~~ ~~C_Type_68~~ ~~C_Type_78~~ ~~C_Type_72~~ ~~C_Type_26~~ ~~C_Type_28~~ ~~C_Type_71~~	C_Type_19 ~~C_Type_46~~ C_Type_68 C_Type_78 ~~C_Type_72~~ C_Type_26 C_Type_28 ~~C_Type_71~~	C_Type_19 ~~C_Type_46~~ ~~C_Type_68~~ ~~C_Type_78~~ ~~C_Type_72~~ ~~C_Type_26~~ C_Type_28 C_Type_71	C_Type_19 C_Type_46 C_Type_68 C_Type_78 C_Type_72 C_Type_26* ~~C_Type_28~~ C_Type_71
3c.i	~~C_Type_19~~ ~~C_Type_46~~ ~~C_Type_68~~ ~~C_Type_78~~ ~~C_Type_72~~	C_Type_19 ~~C_Type_46~~ C_Type_68 C_Type_78 ~~C_Type_72~~	C_Type_19 ~~C_Type_46~~ ~~C_Type_68~~ C_Type_78 C_Type_72	C_Type_19 C_Type_46 C_Type_68 C_Type_78 C_Type_72
3c.ii	~~C_Type_26~~ ~~C_Type_28~~	~~C_Type_26~~ C_Type_28	~~C_Type_26~~ ~~C_Type_28~~	C_Type_26* C_Type_28
3c.iii	~~C_Type_73~~ ~~C_Type_79~~	~~C_Type_73~~ ~~C_Type_79~~	C_Type_73 C_Type_79	~~C_Type_73~~ ~~C_Type_79~~

3.5 - Tree Branch 4

Tree Branch 4 (see Table. 13) contains C_Type_6, a variant of a loincloth with sashes, C_Type_10, a chiton with a cloak/mantle, C_Type_51, a tutulus, C_Type_85, a form of drapery that goes over the head, C_Type_9, a chiton with rounded mantle, and C_Type_30, a rounded mantle. C_Type_80 is a bracelet, C_Type_39 are a pair of pointed calcei repandi, C_Type_81 is a disc shaped earring, C_Type_18 a rounded mantle and cloak combined with a short chiton, C_Type_70 is long wavy hair, and C_Type_42 is a shoe. The clothing and adornment type groups of Tree Branch 4 are found in the 6th, 5th, and 4th centuries BC.

The tree branch's key associations are dancer, castanet dancer, reveller, syrinx player, and barbiton player. Yet, the forms, construction, and properties of most, but not all, of the clothing and adornment types amidst Tree Branch 4 suggest relaxation and enjoyment, and not strenuously active participation. Therefore, its types are dichotomous, both with those few types of its groupings that suggest activity, action, and movement, and with the majority of its *other* content type associations. Its *inactive* clothing and adornment types represent the attire of those being entertained rather than the entertainers; this contrasts the attributed *active* associations. The bodily restrictions imposed by the majority of the garments properties, attested by their elaborate adornment, speaks to an inactive role, a role of socialisation, relaxation, revelry, banqueting, and enjoyment. In contrast, the few simple and sensible types of this group speak to an active rather than an inactive or passive role. This suggests variability, and the need to consider the bodily affect of the painted type, and its contextualisation upon a body in a particular space and place, prior to attributing *other* content type associations.

The *active* and *inactive* properties of clothing and adornment types are not mutually exclusive, and there is a blurring of the lines between those who are *inactive* and those who are *active*. The behaviour of those deemed inactive by their dress can change with only slight modifications to their attire, and vice-versa. This suggests the potential for wearers to transition across boundaries. For example, castanet dancers are dressed similarly to banqueters, minus one or two type exceptions. The clothing and adornment types here imply the fluidity of their presented boundary, as it is a boundary that can be navigated by the simple addition, or removal, of types of dress. However, there are clothing and adornment types that are not interchangeable, and hence boundaries that cannot be crossed. For example, cupbearers and servants are never dressed similarly to castanet dancers or banqueters, and cannot cross this boundary. This is a stricter socio-cultural boundary, a boundary firmly established amongst those familiar with the sartorial codes and practices of their community. Such sartorial codes affect a wearer, through the physical properties of their dress, and also affect a viewer, through the dress's implied societal norms, which indicate their associated status and prestigious contexts, or lack thereof.

Tree Branch 4 emphasises the physical properties presented by the forms of painted dress, and their impact on *other* content type association. Properties of clothing and adornment types facilitating processes of *other* content type attribution are a key theme amidst interpreting the hierarchical clustering analyses' results (as per Veblen, 2007). Tree Branch 4 also offers a commentary, see in particular Group 4c.ii and 4c.iii, on the variability of wearing the clothing and adornment types, and how the pieces do not always go together to form consistent entities (as per Barthes, 1973: 181). Its groupings of dress acknowledge the multiple social categories that make up an identity, and recognise a broader sartorial ambivalence (see Davies, 1994: 21-29). Clothing and adornment types are *pieced together* in variable configurations that attest to overlapping social categories (Colburn & Heyn, 2008: 10). This variability in *how* the different types go together is important, and Tree Branch 4 conveys the ambiguous nature of its groupings, and how modifications to painted dress results in shifts of social identity or perceptions of social identity. Furthermore, how the clothing and adornment types go together is too influenced by their physical constructional properties and context (as per Veblen, 2007). Their dress compositions correlate with their wearer's *active* or *inactive* participation and behaviour (as per Veblen, 2007). Hence, the importance of considering societal effect and bodily affect cannot be overstated, as it is through these concepts that materiality and communicability are returned to the painted depictions of dress.

Table 13: Tree Branch 4 (see Fig. 3.7)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
4a	C_Type_6 C_Type_10 C_Type_51 C_Type_85 C_Type_9 C_Type_30 C_Type_80 C_Type_39 C_Type_81 C_Type_18 C_Type_70 C_Type_42	N/A	N/A
4b.i	N/A	C_Type_6 C_Type_10 C_Type_51 C_Type_85	N/A
4b.ii	N/A	C_Type_9 C_Type_30 C_Type_80 C_Type_39 C_Type_81 C_Type_18 C_Type_70 C_Type_42	N/A

Table 13: Tree Branch 4 (see Fig. 3.7)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
4c.i	N/A	N/A	C_Type_6 C_Type_10 C_Type_51
4c.ii	N/A	N/A	C_Type_9 C_Type_30 C_Type_80 C_Type_39 C_Type_81
4c.iii	N/A	N/A	C_Type_18 C_Type_70 C_Type_42

Table 14: Tree Branch 4 - Clothing & Adornment Type Group Replication

Similarity Measure	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Poor Match (25%+)	Fair Match (50%+)	N/A	Fair Match (50%)
Jaccard	Good Match (75%)	Good Match (75%+)	N/A	Fair Match (50%)
Kulczynski	Poor Match (25%)	Good Match (75%+)	N/A	Good Match (75%+)
Ochiai	Fair Match (50%)	Poor Match (25%)	N/A	Poor Match (25%)
Raup-Crick	Good Match (75%)	Poor Match (25%)	N/A	N/A
Simpson	Fair Match (50%)	Perfect Match (100%)	N/A	Fair Match (50%+)
Euclidean	N/A	N/A	Poor Match (25%+)	N/A

Note – this table begins on the following page.

Table 15: Tree Branch 4 - Chronology

Group	6th Century BC	5th Century BC	4th Century	3rd Century BC

Table 15: Tree Branch 4 - Chronology

Group	6th Century BC	5th Century BC	4th Century	3rd Century BC
4a	~~C_Type_6~~ C_Type_10 C_Type_51 ~~C_Type_85~~ ~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 C_Type_39 C_Type_81 ~~C_Type_18~~ C_Type_70 ~~C_Type_42~~	C_Type_6 C_Type_10 C_Type_51 C_Type_85 C_Type_9 C_Type_30 C_Type_80 C_Type_39 C_Type_81 C_Type_18 C_Type_70 C_Type_42	~~C_Type_6~~ C_Type_10 C_Type_51 ~~C_Type_85~~ C_Type_9 C_Type_30 C_Type_80 C_Type_39 C_Type_81 ~~C_Type_18~~ ~~C_Type_70~~ ~~C_Type_42~~	~~C_Type_6~~ ~~C_Type_10~~ C_Type_51 ~~C_Type_85~~ ~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 ~~C_Type_39~~ C_Type_81 ~~C_Type_18~~ C_Type_70 ~~C_Type_42~~
4b.i	~~C_Type_6~~ ~~C_Type_10~~ ~~C_Type_51~~ ~~C_Type_85~~	C_Type_6 C_Type_10 C_Type_51 ~~C_Type_85~~	~~C_Type_6~~ C_Type_10 C_Type_51 ~~C_Type_85~~	~~C_Type_6~~ ~~C_Type_10~~ C_Type_51 ~~C_Type_85~~
4b.ii	~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 C_Type_39 C_Type_81 ~~C_Type_18~~ C_Type_70 ~~C_Type_42~~	~~C_Type_9~~ C_Type_30 C_Type_80 ~~C_Type_39~~ C_Type_81 C_Type_18 C_Type_70 C_Type_42	C_Type_9 ~~C_Type_30~~ C_Type_80 C_Type_39 C_Type_81 ~~C_Type_18~~ ~~C_Type_70~~ ~~C_Type_42~~	~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 ~~C_Type_39~~ C_Type_81 C_Type_18 C_Type_70 ~~C_Type_42~~
4c.i	~~C_Type_6~~ ~~C_Type_10~~ ~~C_Type_51~~	~~C_Type_6~~ C_Type_10 C_Type_51	~~C_Type_6~~ C_Type_10 C_Type_51	~~C_Type_6~~ ~~C_Type_10~~ ~~C_Type_51~~
4c.ii	C_Type_9 C_Type_30 C_Type_80 C_Type_39 C_Type_81	~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 ~~C_Type_39~~ C_Type_81	~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 ~~C_Type_39~~ C_Type_81	~~C_Type_9~~ ~~C_Type_30~~ C_Type_80 ~~C_Type_39~~ C_Type_81
4c.iii	~~C_Type_18~~ ~~C_Type_70~~ ~~C_Type_42~~	C_Type_18 C_Type_70 C_Type_42	~~C_Type_18~~ ~~C_Type_70~~ ~~C_Type_42~~	~~C_Type_18~~ ~~C_Type_70~~ ~~C_Type_42~~

3.6 - Tree Branch 5

Tree Branch 5 (see Table. 16) is composed of C_Type_14, a short sleeved and loose fitting chiton, C_Type_86, a necklace of ram's-head pendants, C_Type_65, long hair in ponytails, C_Type 21, a chiton and mantle, and C_Type_55, a Corinthian styled helmet. The significant associations of this tree branch are hetaira/woman, lyre player, pole jumper, athlete, wrestler, young, old, judge, epistates, boxer, discobolos, trainer, male, runner and Agonothetes. Tree Branch 5 interacts with the same cultural, colour, patterns, and natural *other* content types as Tree Branch 4, but Tree Branch 5's clothing and adornment types appear only in the 6th century BC. The association with musicians, dancers, revellers, athletic competitions, and hetaira/woman are consistent with funerary activity (Brandt, 2015: 113), and this consistency is shared with Tree

Branch 4. Tree Branch 5 and Tree Branch 4 dress dancers, revellers, or hetaira/woman, wearing C_Type_14 in combination with C_Type_65. They also wear the hairstyle of C_Type_70, and the bracelet and earrings of C_Type_80 and 81, and the tutulus of C_Type_51, the chiton and mantle combination of C_Type_10, and the calcei repandi of C_Type_39. Similarly, the old, judge/epistates, trainer or Agonothetes are too dressed, with C_Type_21 and C_Type_39. The boxer, wrestler, discobolos, pole jumper or athlete wear C_Type_55, combined with the shoes of C_Type_42, and the mantle of C_Type_30, or the sash of C_Type_6. Tree Branch 4's and Tree Branch 5's interaction is important because they are demonstrative of the sometimes less than concrete sartorial entities formed by the pieces that 'go together' (as per Barthes, 1973: 181). They too highlight the physical construction and properties of painted dress as influencers of *other* content type association (as per Veblen, 2007).

Yet, not only does Tree Branch 5 demonstrate sartorial flexibility, interchange-ability, and adaptability, but it also fixes C_Type_86 as uniquely captive of painted dress as a communicative device. C_Type_86 is an infrequent and idiosyncratic clothing and adornment type, which contrasts the shared painted sartorial community typology (see Read, 2007: 86). Albeit, far from not being treated co-equally with dress combinations that 'supposedly have more cultural relevance' through their typological conformity and frequency (Read, 2007: 109), C_Type_86 provides insight from a different viewpoint (see Wendrich, 2013: 90). Its idiosyncratic properties underline that it is not only a clothing and adornment type's combination of attributes that are significant, but also the frequency with which they occur (see Read, 2007: 86). There is not a type/variety distinction to distinguish between concepts of societal and individual dress (see Wendrich, 2013: 90), as a 'bauble made by a fanciful producer', such as C_Type_86, remains a legitimate type (see Wendrich, 2013: 90; & Read, 2007: 87). Thus, occurrence of such a distinct, but infrequent, painted dress type amidst an assemblage populates the total sum of painted sartorial non-verbal communication (see Wendrich, 2013: 90). Furthermore, attention to the generally frequent, and also to the infrequently idiosyncratic, clothing and adornment types, emphasises the need to investigate the relationship between typology, frequency, and associative similarity strength.

Table 16: Tree Branch 5 (see Fig. 3.8)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
5a	C_Type_14 C_Type_86 C_Type_65 C_Type_21 C_Type_55	N/A	N/A

Table 16: Tree Branch 5 (see Fig. 3.8)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
5c.i	N/A	N/A	C_Type_14 C_Type_86 C_Type_65 C_Type_21

Table 17: Tree Branch 5 - Clothing & Adornment Type Group Replication

Similarity Measure	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Good Match (75%+)	Poor Match (25%+)	N/A	Good Match (75%)
Jaccard	Good Match (75%+)	Poor Match (25%+)	N/A	Fair Match (50%)
Kulczynski	Perfect Match (100%)	Perfect Match (100%)	N/A	Fair Match (50%)
Ochiai	Perfect Match (100%)	Poor Match (25%+)	N/A	Good Match (75%)
Raup-Crick	Fair Match (50%+)	Poor Match (25%)	N/A	N/A
Simpson	Poor Match (25%+)	Perfect Match (100%)	N/A	Good Match (75%)
Euclidean	N/A	N/A	Fair Match (50%)	N/A

Table 18: Tree Branch 5 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
5a	C_Type_14 C_Type_86 C_Type_65 C_Type_21 C_Type_55	C_Type_14 ~~C_Type_86~~ ~~C_Type_65~~ C_Type_21 ~~C_Type_55~~	C_Type_14 ~~C_Type_86~~ ~~C_Type_65~~ ~~C_Type_21~~ ~~C_Type_55~~	C_Type_14 ~~C_Type_86~~ ~~C_Type_65~~ ~~C_Type_21~~ ~~C_Type_55~~
5c.i	C_Type_14 C_Type_86 C_Type_65 C_Type_21	C_Type_14 ~~C_Type_86~~ ~~C_Type_65~~ C_Type_21	C_Type_14 ~~C_Type_86~~ ~~C_Type_65~~ ~~C_Type_21~~	C_Type_14 ~~C_Type_86~~ ~~C_Type_65~~ ~~C_Type_21~~

3.7 - Tree Branch 6

Tree Branch 6 (see Table. 19) contains C_Type_90, a twin bandolier of metal discs, and C_Type_94, a belt of metal discs. It also contains C_Type_45, a boot, and C_Type_27 a sleeved chiton. Key *other* content type associations include candelabrum, folding stool, incense burner/thymiaterion, achelous head, erotic scene, sphinx, bell, chimera, weapon dancer, flute player, juggler, acrobat and javelin thrower. Tree Branch 6 inhabits the same context of funerary activity as Tree Branch 4 and Tree Branch 5, but its grouped clothing and adornment types appear only in the 6th century BC. Flute players wear C_Type_27, contrasting the dress of syrinx players and other performers, but C_Type_90 and C_Type_94 are worn by a girl performing a balancing act amidst a peculiarly depicted kind of *kottabos game* (see Vellucci, 1985: 29). Her dress is a unique and distinguishable signifier of a distorted funerary event, which was expected, and more likely, to utilise competitions of the classical tradition (see Gori, 1988: 367). As well as wearing the metal disc belt around her waist, and the metal disc cross-straps passing over both of her shoulders, the girl also wears a long transparent chiton with short sleeves, and over this a sleeveless red jerkin, along with a tall red cap (tutulus or headscarf?), and an over-sized disc shaped earring (see Fig. 4.10). Furthermore, she is barefoot. Her clothing and adornment types are a key part of her 'active' performance (as per Veblen, 2007). Therefore, they should be depicted to best enable the physical actions required for performing her strange *kottabos game*. Yet, her dress is drawn to hinder, rather than facilitate her activity. Its sartorial impracticality, alongside its distinctiveness, and bodily restriction, highlights its need to be examined according to proponents of materiality (see Keane, 2005: 183) and communicability (see Hansen, 2004: 369). This is necessary so as to decipher its specificity, which was tailored to ensure effective non-verbal communication of its messages priorities.

Table 19: Tree Branch 6 (see Fig. 3.9)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
6a	C_Type_27 C_Type_45 C_Type_90 C_Type_94	N/A	N/A
6c.i	N/A	N/A	C_Type_27 C_Type_45
6c.ii	N/A	N/A	C_Type_90 C_Type_94

Table 20: Tree Branch 6 - Clothing & Adornment Type Group Replication				
Similarity Measure	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Dice	Perfect Match (100%)	Fair Match (50%)	N/A	Fair Match (50%)
Jaccard	Fair Match (50%)	Fair Match (50%)	N/A	Fair Match (50%)
Kulczynski	Fair Match (50%)	Perfect Match (100%)	N/A	Fair Match (50%)
Ochiai	Perfect Match (100%)	Fair Match (50%)	N/A	Perfect Match (100%)
Raup-Crick	Fair Match (50%)	Good Match (75%)	N/A	N/A
Simpson	Fair Match (50%)	Fair Match (50%)	N/A	Perfect Match (100%)
Euclidean	N/A	N/A	No Match (0%)	N/A

Table 21: Tree Branch 6 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
6a	C_Type_27 C_Type_45 C_Type_90 C_Type_94	C_Type_27 ~~C_Type_45~~ ~~C_Type_90~~ C_Type_94	C_Type_27 ~~C_Type_45~~ ~~C_Type_90~~ ~~C_Type_94~~	~~C_Type_27~~ ~~C_Type_45~~ ~~C_Type_90~~ ~~C_Type_94~~
6c.i	C_Type_27 C_Type_45	C_Type_27 ~~C_Type_45~~	C_Type_27 ~~C_Type_45~~	C_Type_27 C_Type_45
6c.ii	C_Type_90 C_Type_94	~~C_Type_90~~ C_Type_94	~~C_Type_90~~ ~~C_Type_94~~	~~C_Type_90~~ ~~C_Type_94~~

3.8 - Tree Branch 7

Tree Branch 7 (see Table. 22) is composed of C_Type_7, a set of Greek styled (linen?) armour, C_Type_35, a triangular shaped mantle with a tablet woven border - indicated by the similar pattern of triangles and stripes on its outmost border when compared to the Verucchio mantles (see Knudsen, 2012: 262), C_Type_60, a helmet, C_Type_36, a long cloak, C_Type_37, a large and loosely fitted mantle, C_Type_48, a boot, and C_Type_12, a sleeved chiton worn with a mantle draped over one shoulder. Its groupings are found in the 5th century BC, but some are evident in the 6th, 4th and 3rd centuries BC. Its *other* content type associations articulate the accruements of a banquet or an honorific funerary ceremony (see Brandt, 2015: 113). Significant associations include kylikeion, hypnos, thanatos, telamon, patera, vase or vases, stamnos, hydra, stand (with small vases), boar hunt, hunting scene, net, schnabelkanne, oinochoe, amphora, kottabos game, krater, strainer or ladle, alabastron, pyxis, rhython, and stool. Lictor, horn player,

priestess, warrior, kithara player, rider, hunter and dwarf are also associated with Tree Branch 7. Yet, Tree Branch 7's clothing and adornment types physical properties and construction do not, for the most part, characterise the expected attire of elite banqueting participants, but rather those serving or entertaining the banqueters. However, C_Type_12's constructional properties align with Tree Branch 7's inactive *other* content type associations. Thus, a reversed dichotomy (from Tree Branch 4) between the physical properties of the clothing and adornment types, and their *other* content type associations (as per Veblen, 2007), delineates between and within an *active* and *inactive* boundary of painted dress.

Tree Branch 7's groupings primarily express activity and movement. C_Type_7 and C_Type_60 are pieces of armour that protect, C_Type_36 is a free flowing cape/mantle, C_Type_37 is a loose fitting and unrestrictive mantle, and C_Type_48 are tough and sturdy boots. Furthermore, activity and movement are suggested by association with hunter, warrior, boar hunt, hunting scene, kottabos game, and rider. The dichotomy between *other* content type associations, and the properties of C_Type_12, highlights a distinctive sartorial separation between the 'active' and 'inactive'. Dress can provide full ambulation, but it can also restrict or immobilise the arms, the legs, the head, the eyes, the waist, the hands, the fingers or the feet. Therefore, it enables and encourages, or prohibits and restricts, the range of its wearer's behaviours, performances, and practices (see Schiffer, 1999: 30 - 50). Thereby, the constructional properties of Tree Branch 7's painted clothing and adornment types indicate their bodily affect, and this affect conditions their perceptual effect on their viewer. From this they non-verbally communicate a wearer's permissible sartorial range of potential activity, which determines their likely role and place amidst the banqueting hierarchy. The hierarchical sartorial scale of a banquet is predicated on the basis of a correlating relationship between garment construction, bodily affect, activity/inactivity, and frequency. This exposes Tree Branch 7 as a particularly useful encapsulation of 6th — 5th century BC sartorial social structures, and recognises the importance of painted dress as an intentionally divisive non-verbally communicative tool.

Table 22: Tree Branch 7 (see Fig. 3.10)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
7a	C_Type_7 C_Type_35 C_Type_60 C_Type_36 C_Type_37 C_Type_48 C_Type_12	N/A	N/A
7c.i	N/A	N/A	C_Type_7 C_Type_35 C_Type_60 C_Type_36

Table 22: Tree Branch 7 (see Fig. 3.10)			
Group	**0.50 - 0.70**	**0.80 - 0.95**	**0.96 - 1**
7c.ii	N/A	N/A	C_Type_37 C_Type_48 C_Type_12

Table 23: Tree Branch 7 - Clothing & Adornment Type Group Replication				
Similarity Measure	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Dice	Good Match (75%)	Good Match (75%+)	N/A	Good Match (75%+)
Jaccard	Good Match (75%+)	Good Match (75%+)	N/A	Good Match (75%+)
Kulczynski	Fair Match (50%+)	Poor Match (25%+)	N/A	Fair Match (50%+)
Ochiai	Perfect Match (100%)	Poor Match (25%+)	N/A	Good Match (50%+)
Raup-Crick	Good Match (75%)	Perfect Match (100%)	N/A	N/A
Simpson	Fair Match (50%)	Perfect Match (100%)	N/A	Poor Match (25%+)
Euclidean	N/A	N/A	Good Match (50%+)	N/A

Table 24: Tree Branch 7 - Chronology

Group	**6th Century BC**	**5th Century BC**	**4th Century BC**	**3rd Century BC**
7a	~~C_Type_7~~ ~~C_Type_35~~ ~~C_Type_60~~ ~~C_Type_36~~ C_Type_37 C_Type_48 ~~C_Type_12~~	C_Type_7 C_Type_35 C_Type_60 C_Type_36 C_Type_37 C_Type_48 C_Type_12	C_Type_7 C_Type_35 ~~C_Type_60~~ C_Type_36 C_Type_37 ~~C_Type_48~~ C_Type_12	~~C_Type_7~~ ~~C_Type_35~~ ~~C_Type_60~~ C_Type_36 ~~C_Type_37~~ C_Type_48 C_Type_12
7c.i	~~C_Type_7~~ ~~C_Type_35~~ ~~C_Type_60~~ ~~C_Type_36~~	C_Type_7 C_Type_35 C_Type_60 C_Type_36	C_Type_7 C_Type_35 ~~C_Type_60~~ C_Type_36	~~C_Type_7~~ ~~C_Type_35~~ ~~C_Type_60~~ C_Type_36

Table 24: Tree Branch 7 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
7c.ii	C_Type_37 C_Type_48 ~~C_Type_12~~	C_Type_37 C_Type_48 C_Type_12	C_Type_37 ~~C_Type_48~~ C_Type_12	~~C_Type_37~~ C_Type_48 C_Type_12

3.9 - Tree Branch 8

Tree Branch 8 (see Table. 25) is composed of C_Type_11, a chiton combined with a triangular mantle draped over the head and resting on both shoulders, C_Type_63, curly short hair, C_Type_83, a decorative hair band, C_Type_41, a pair of sandals, and C_Type_82, a decorative wreath worn on the head. This branch also contains C_Type_92, a pair of bracelets, C_Type_89, another decorative head band, C_Type_13, a chiton with loosely draped mantle, C_Type_29 a loosely draped mantle that leaves the chest exposed, C_Type_88, a type of diadem, C_Type_66, long hair worn in a single bunch/ponytail, C_Type_25, a long sleeved chiton, and C_Type_84, a beaded necklace. There is also C_Type_15, a chiton with a mantle draped over one shoulder, C_Type_38, a shoe, C_Type_67, short spiked hair, and C_Type_93, a horseshoe earring. Its groupings are found throughout the 6th, 5th, 4th, and 3rd centuries BC. Key *other* content type associations include lituus, lictor, priestess, egg, table, banquet, couch, ladle, kline, kylix, chair, food, lebes, farewell scene, procession, dogtooth frieze, fan, kyathos, mirror, cupbearers, servants, cat (or wild cat), cock (or hen), pomegranate, demon and wave pattern. Tree Brach 8 dresses up funerary banquets as displays of conspicuous consumption (see Rathje, 2013: 824). It is the largest tree branch, and it demonstrates subtler painted dress nuances, rather than broader inter social-group contrasts. It facilitates access to the underlying social dynamics for depicting funerary banquets through identifying intentionally tailored groupings, which signal success, and encourage deference (Hayden, 2009: 34 & 36). It too articulates how its painted sartorial arrangements change over time so as to redraw their established divisions (see Hayden, 2009: 34).

Tree Branch 8's clothing and adornment type groupings are, for the most part, luxurious, and include a range of 'stylish' accessories. For example, C_Type_67, the distinctive hairstyle, and C_Type_93, the horseshoe earring, are both opulent, stylised, and exemplars of 'conspicuous consumption' (Veblen, 2007). Furthermore, the properties of C_Type_67 and C_Type_93 are *inactive*, and thus suggestive of belonging to the elite. So too are C_Type_29, 13, 93, 88, 82, 83, 11, 89, 84, 92 and 41 unsuitable as attire for strenuous physical activity due to their properties of construction, and decoration. Group 8c.ii and Group 8c.vi present accessories, which go with and compliment Group 8c.i, 8c.ii, 8c.iii, 8c.iv, and 8c.v, however, although evidently to be worn in the same banqueting context, Group 8c.ii and Group 8c.vi accessories are not often worn

together, and this amplifies their ability to alter banqueting social dynamics. For example, their infrequent coalescence accentuates an altered projection of 'taste' (see Veblen, 2007: 78 - 110), which re-situates the economic, political, and social synonyms of painted dress. Therefore, Tree Branch 8 illustrates the differing utilisations and governing priorities attached to the deliberate manipulation of painted dress as a tool of non-verbal communication. It recognises a shifting need to dress painted tombs according to prevailing social, cultural, political, and economic transformations.

The analysis grouped the painted dress that was *similar*, but this is not necessarily the painted dress that always 'goes together' (Barthes, 1973: 181). Tree Branch 8 exemplifies such methodological issues of composition, combination, and association, which stem from the analyses' large number of variables, whose statistically identified groupings do not wholly provide a rational basis for discerning between painted dress that does and does not 'go together' (Barthes, 1973: 181; also see Adams & Adams, 1991: 230). For example, C_Type_83, C_Type_82, and C_Type_89 are headwear that could not be worn, at least in a comfortable or practical sense, concurrently (as per Barthes, 1973). Thus, they must be excluded from considerations of bodily composition. Rather they can be thought optional accessories to be worn with C_Type_11, C_Type_63, C_Type_41, and C_Type_92. Similarly to the lituus, which accessorises C_Type_15 and C_Type_38 - an augur's or haruspice's attire (see Hammond, 2009: 41). Evidently, the sartorial repertoire depicted throughout the Tarquinian tomb paintings, while not a widely available vocabulary, was malleable by those with the means to manipulate its full range of language. Thereby, choice and fluidity of painted dress has been more or less statistically identified for those within particular social, economic, and political boundaries, suggesting their altered activity or participation — be it their status, ritual role or religious behaviours (see Gleba, 2013: 806). Furthermore, another methodological note, the clothing and adornment types associated with servants and cupbearers, for example, are not necessarily the dress of the servants and cupbearers, but the attire of those *seen* with, or associated with, cupbearers and servants, such as the elite whom they serve.

Table 25: Tree Branch 8 (see Fig. 3.11)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
8a	C_Type_11 C_Type_63 C_Type_83 C_Type_41 C_Type_82 C_Type_92 C_Type_89 C_Type_13 C_Type_29 C_Type_88 C_Type_66 C_Type_25 C_Type_84 C_Type_15 C_Type_38 C_Type_67 C_Type_93	N/A	N/A

Table 25: Tree Branch 8 (see Fig. 3.11)			
Group	**0.50 - 0.70**	**0.80 - 0.95**	**0.96 - 1**
8b.i	N/A	C_Type_11 C_Type_63 C_Type_83 C_Type_41 C_Type_82 C_Type_92 C_Type_89	N/A
8b.ii	N/A	C_Type_15 C_Type_38 C_Type_67 C_Type_93	N/A
8c.i	N/A	N/A	C_Type_11 C_Type_63 C_Type_83
8c.ii	N/A	N/A	C_Type_41 C_Type_82 C_Type_92 C_Type_89
8c.iii	N/A	N/A	C_Type_13 C_Type_29 C_Type_88 C_Type_66
8c.iv	N/A	N/A	C_Type_25 C_Type_84
8c.v	N/A	N/A	C_Type_15 C_Type_38
8c.vi	N/A	N/A	C_Type_67 C_Type_93

Table 26: Tree Branch 8 - Clothing & Adornment Type Group Replication				
Similarity Measure	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Dice	Good Match (75%+)	Fair Match (50%+)	N/A	Good Match (75%)
Jaccard	Good Match (75%)	Fair Match (50%+)	N/A	Good Match (75%+)
Kulczynski	Good Match (75%)	Poor Match (25%)	N/A	Good Match (75%)
Ochiai	Perfect Match (100%)	Fair Match (50%)	N/A	Good Match (75%+)

Table 26: Tree Branch 8 - Clothing & Adornment Type Group Replication				
Similarity Measure	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Raup-Crick	Good Match (75%)	Perfect Match (100%)	N/A	N/A
Simpson	Poor Match (25%+)	Perfect Match (100%)	N/A	Poor Match (25%+)
Euclidean	N/A	N/A	Good Match (75%)	N/A

Table 27: Tree Branch 8 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
8a	~~C_Type_11~~ C_Type_63 C_Type_83 C_Type_41 C_Type_82 C_Type_92 ~~C_Type_89~~ C_Type_13 ~~C_Type_29~~ ~~C_Type_88~~ C_Type_66 C_Type_25 ~~C_Type_84~~ C_Type_15 ~~C_Type_38~~ ~~C_Type_67~~ ~~C_Type_93~~	C_Type_11 C_Type_63 C_Type_83 C_Type_41 C_Type_82 C_Type_92 C_Type_89 ~~C_Type_13~~ ~~C_Type_29~~ ~~C_Type_88~~ ~~C_Type_66~~ C_Type_25 C_Type_84 C_Type_15 C_Type_38 ~~C_Type_67~~ ~~C_Type_93~~	~~C_Type_11~~ C_Type_63 C_Type_83 C_Type_41 C_Type_82 C_Type_92 C_Type_89 C_Type_13 C_Type_29 C_Type_88 C_Type_66 C_Type_25 C_Type_84 C_Type_15 C_Type_38 C_Type_67 C_Type_93	~~C_Type_11~~ C_Type_63 ~~C_Type_83~~ ~~C_Type_41~~ C_Type_82 C_Type_92 C_Type_89 ~~C_Type_13~~ ~~C_Type_29~~ ~~C_Type_88~~ C_Type_66 C_Type_25 C_Type_84 ~~C_Type_15~~ C_Type_38 ~~C_Type_67~~ ~~C_Type_93~~
8b.i	~~C_Type_11~~ C_Type_63 ~~C_Type_83~~ C_Type_41 C_Type_82 C_Type_92 ~~C_Type_89~~	C_Type_11 C_Type_63 C_Type_83 C_Type_41 C_Type_82 C_Type_92 C_Type_89	~~C_Type_11~~ C_Type_63 C_Type_83 ~~C_Type_41~~ C_Type_82 C_Type_92 ~~C_Type_89~~	~~C_Type_11~~ C_Type_63 ~~C_Type_83~~ ~~C_Type_41~~ C_Type_82 C_Type_92 C_Type_89
8b.ii	~~C_Type_15~~ ~~C_Type_38~~ ~~C_Type_67~~ ~~C_Type_93~~	C_Type_15 C_Type_38 ~~C_Type_67~~ ~~C_Type_93~~	C_Type_15 ~~C_Type_38~~ C_Type_67 C_Type_93	C_Type_15 ~~C_Type_38~~ ~~C_Type_67~~ ~~C_Type_93~~
8c.i	~~C_Type_11~~ ~~C_Type_63~~ ~~C_Type_83~~	~~C_Type_11~~ C_Type_63 C_Type_83	~~C_Type_11~~ C_Type_63 C_Type_83	~~C_Type_11~~ ~~C_Type_63~~ ~~C_Type_83~~

Table 27: Tree Branch 8 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
8c.ii	~~C_Type_41~~ ~~C_Type_82~~ ~~C_Type_92~~ ~~C_Type_89~~	C_Type_41 C_Type_82 ~~C_Type_92~~ ~~C_Type_89~~	C_Type_41 C_Type_82 C_Type_92 ~~C_Type_89~~	~~C_Type_41~~ ~~C_Type_82~~ C_Type_92 C_Type_89
8c.iii	~~C_Type_13~~ ~~C_Type_29~~ ~~C_Type_88~~ ~~C_Type_66~~	C_Type_13 C_Type_29 ~~C_Type_88~~ C_Type_66	~~C_Type_13~~ C_Type_29 C_Type_88 C_Type_66	~~C_Type_13~~ ~~C_Type_29~~ C_Type_88 ~~C_Type_66~~
8c.iv	~~C_Type_25~~ ~~C_Type_84~~	~~C_Type_25~~ ~~C_Type_84~~	C_Type_25 C_Type_84	C_Type_25 C_Type_84
8c.v	~~C_Type_15~~ ~~C_Type_38~~	C_Type_15 C_Type_38	C_Type_15 C_Type_38	~~C_Type_15~~ ~~C_Type_38~~
8c.vi	~~C_Type_67~~ ~~C_Type_93~~	~~C_Type_67~~ ~~C_Type_93~~	C_Type_67 C_Type_93	~~C_Type_67~~ ~~C_Type_93~~

3.10 - Tree Branch 9

Tree Branch 9's (see Table. 28) groupings are found in the 5th, 4th and 3rd centuries BC and are comprised of C_Type_31, a mantle worn over both shoulders and pinned/tied together across the chest, C_Type_59, a helmet, C_Type_33, a narrow mantle or long sash, C_Type_50, a short hairstyle or a hat, C_Type_57, a wolf cap, C_Type_62, a short hair style, and C_Type_75, a short beard. Noteworthy *other* content type associations include wave pattern, horn, lituus, caduceus, demon, fasces, aryballos, guinea fowl, Hades, Persephone, Geryoneus, throne or chair, lictor, horn player, priestess, warrior, kithara player, rider, hunter and dwarf, animal, bukranion, horse, feline, crane, pygmy, goat and dove. Tree Branch 9, similarly to Tree Branch 2 and Tree Branch 3, has a predisposition toward the mythological and supernatural. Therefore, Tree Branch 9's clothing and adornment type groupings present distinct and diagnostic properties of construction, and decoration, which assist in delineating between significant sartorial boundaries.

Tree Branch 9 associates with mythology, battle, violence, death, a journey, transportation, trails, hunting, and funerary activity *other* content types (see Brandt, 2015: 113). Its clothing and adornment types are active, liminal, and suggestive of an emerging pictorial comprehension of the underworld, which structure and identify a new approach to their paintings sartorial strategies of non-verbal information exchange (see Wobst, 1977). The feline (unspecified) association also suggests a banqueting context supplementing the mythological and supernatural. C_Type_57 is the distinct wolf cap worn by Hades in the *Tomb of the Orcus II,* and C_Type_59 is worn by pygmies doing battle with cranes in the *Tomb of the Pygmies*. C_Type_59 too is distinctive and well suited to the diminutive pygmies in their effort to do battle with a group of cranes (Ste-

ingraber, 2006: 162). Such distinct and otherworldly garments align with C_Type_31's horse *other* content type association, which suggests, alongside its properties and design, adornment and accommodation of a horse rider. Connotations of a horse rider fit with the aforementioned shift in the strategy of non-verbal sartorial communication, as the horse and rider indicate a passage, transition or journey to the Underworld (Krauskopf, 2006: 70).

Amidst funerary contexts what clothing and adornment types mean is multifaceted (see Krauskopf, 2006: 67). Therefore, Tree Branch 9 could sartorially articulate a hunt setting forth from a banquet, or a hunt returning to a banquet with bounty to begin honouring their ancestors, or deceased ancestors banqueting in celebration, with the newly arrived deceased, in the Underworld, surrounded by demons, heroes, and myths. The association with aryballos, guinea fowl and dove (hunted animals?) suggests a banqueting and hunting theme, and such animals might also possess other symbolic connotations (Brandt, 2015: 113). C_Type_33's properties indicate that it is not worn when hunting, but the short hair (or hat) of C_Type_50 is suited for hunting. C_Type_33 was likely worn only in the presence of hunters, but in contrast hunters could wear C_Type_50 quite comfortably without obstructing their activity. By embracing 'fashionological' principles of how, what, effect, and affect Tree Branch 9 illustrates the boundaries between the distinct and the mundane, the natural and the supernatural, the things that go together and the things that do not go together, and the active and the inactive. It arranges sartorial display so as to more clearly reconcile ambiguous concepts of death and burial, and to sartorially construct connections between otherwise separate places and spaces.

Table 28: Tree Branch 9 (see Fig. 3.12)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
9a	C_Type_31 C_Type_59 C_Type_33 C_Type_50 C_Type_57 C_Type_62 C_Type_75	N/A	N/A
9b.i	N/A	C_Type_31 C_Type_59 C_Type_33 C_Type_50	N/A
9b.ii	N/A	C_Type_57 C_Type_62 C_Type_75	N/A
9c.i	N/A	N/A	C_Type_31 C_Type_59

Table 28: Tree Branch 9 (see Fig. 3.12)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
9c.ii	N/A	N/A	C_Type_33 C_Type_50
9c.iii	N/A	N/A	C_Type_62 C_Type_75

Table 29: Tree Branch 9 - Clothing & Adornment Type Group Replication

Similarity Measure	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Fair Match (50%+)	Fair Match (50%+)	N/A	Fair Match (50%+)
Jaccard	Fair Match (50%+)	Fair Match (50%+)	N/A	Fair Match (50%+)
Kulczynski	Perfect Match (100%)	Poor Match (25%+)	N/A	Fair Match (50%+)
Ochiai	Fair Match (50%+)	Fair Match (50%+)	N/A	Fair Match (50%+)
Raup-Crick	Fair Match (50%+)	Good Match (75%)	N/A	N/A
Simpson	Fair Match (50%+)	Poor Match (25%)	N/A	Fair Match (50%+)
Euclidean	N/A	N/A	Poor Match (25%)	N/A

Table 30: Tree Branch 9 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
9a	~~C_Type_31~~ ~~C_Type_59~~ ~~C_Type_33~~ ~~C_Type_50~~ ~~C_Type_57~~ C_Type_62 C_Type_75	C_Type_31 ~~C_Type_59~~ C_Type_33 C_Type_50 ~~C_Type_57~~ C_Type_62 C_Type_75	C_Type_31 C_Type_59 ~~C_Type_33~~ C_Type_50 C_Type_57 C_Type_62 C_Type_75	C_Type_31 ~~C_Type_59~~ C_Type_33 ~~C_Type_50~~ ~~C_Type_57~~ ~~C_Type_62~~ C_Type_75
9b.i	~~C_Type_31~~ ~~C_Type_59~~ ~~C_Type_33~~ ~~C_Type_50~~	C_Type_31 ~~C_Type_59~~ C_Type_33 C_Type_50	~~C_Type_31~~ ~~C_Type_59~~ ~~C_Type_33~~ ~~C_Type_50~~	~~C_Type_31~~ ~~C_Type_59~~ C_Type_33 C_Type_50

Table 30: Tree Branch 9 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
9b.ii	~~C_Type_57~~ C_Type_62 C_Type_75	~~C_Type_57~~ C_Type_62 C_Type_75	~~C_Type_57~~ C_Type_62 C_Type_75	~~C_Type_57~~ C_Type_62 ~~C_Type_75~~
9c.i	~~C_Type_31~~ ~~C_Type_59~~	~~C_Type_31~~ ~~C_Type_59~~	C_Type_31 C_Type_59	C_Type_31 ~~C_Type_59~~
9c.ii	~~C_Type_33~~ ~~C_Type_50~~	C_Type_33 C_Type_50	~~C_Type_33~~ C_Type_50	C_Type_33 C_Type_50
9c.iii	~~C_Type_62~~ ~~C_Type_75~~	C_Type_62 C_Type_75	C_Type_62 C_Type_75	~~C_Type_62~~ C_Type_75

3.11 - Tree Branch 10

Tree Branch 10 (see Table. 31) is composed of C_Type_3, a loincloth, C_Type_40, a type of calcei repandi, C_Type_91, a necklace, C_Type_76, a medium length beard, and C_Type_0, nudity. It also contains C_Type_58, curly long hair, C_Type_49, curled pointed shoes, C_Type_22, a patterned tunic with loincloth, C_Type_52 a conical helmet, C_Type_77, a long fake beard and mask, and C_Type_44, a pair of ankle wraps. Its groupings are present in the 6th and 5th centuries BC, and to a lesser extent in the 4th century BC. Key associations of this branch are basin, bag, sack, rope, Phersu game, drapery, bench, kantharos, komos, komast, jumping athlete, Phersu, priest, middle aged, living, and animal fight. C_Type_3, C_Type_22, C_Type_52, C_Type_77 and C_Type_44 are significant as they form a recognisable and distinct entity. C_Type_3, C_Type_40, C_Type_91, and C_Type_76 are also significant because they too form a separate and distinct entity.

Tree Branch 10 signifies the Phersu game, which takes place amidst a myriad of *other* funerary activities. The loincloth (C_Type_3), tunic with loincloth (C_Type_22), conical helmet (C_Type_52), long fake beard and mask (C_Type_77), and ankle wraps (C_Type_44) are indicative of the attire donned by Phersu, and a participant of his game. The participant wears C_Type_3, the loincloth, and a bag or sack over their head, and Phersu wears C_Type_22, C_Type_52, C_Type_77, and C_Type_44. Phersu holds a rope/leash attached to a dog, which is incited to attack the participant who attempts to defend themselves with a club. Hence, the *other* content type associations of bag, sack, rope, Phersu game, Phersu, and animal fight (Avramidou, 2009: 73). Tree Branch 10 facilitates recognition of the intentionally duplicitous nature underlying forms of sartorial non-verbal communication by testifying to an awareness of its ambiguous and transitional properties.

Tree Branch 10 is a microcosm of wider funerary *activity*. The groupings of this microcosm are active pieces of dress, particularly the long fake beard and mask (C_Type_77), and they are the core proponents signifying Phersu and the Phersu game. They corroborate Croon's (1955, 15-16) assertion that the mask and long fake beard (C_Type_77) cannot be understood as exclusive of the character manifested, by pointing out that the word '*Phersu*' refers to the complete figure, and not to the mask alone. This illustrates the importance of the clustering procedures propensity to present coherent compositions of dress, which impact viewers as a grouping, rather than as individual clothing and adornment types. Phersu's dress compositionally refines discussion of his character, his role, and his contextualisation. The distinctive properties of his clothing and adornment type composition enable and encourage such refinement via suggesting a carefully crafted liminal boundary. Thereby, Phersu becomes more than a 'sort of manager of funeral performance' (Altheim, 1929), and more of a sartorial indicator cohesively managing viewer comprehension of the newly deceased's experiences amidst their critical transitional phase from this world to the next (see van Gennep, 1960).

Group 10c.i further refines Tree Branch 10 by presenting the dress of a komast. A kantharos bearing, middle aged, living, wreath or sash wearing komast, who is a part of a komos (see Brandt, 2015: 113). Furthermore, Group 10c.i accentuates Tree Branch 10's hybrid groupings of 'active' and 'inactive' clothing and adornment types. It presents C_Type_3, which is active, and C_Type_40 and C_Type_91, which are inactive. It too contains C_Type_76, which could be classified as either active or inactive, but leans more towards inactive, due to its rather elaborate properties. Thus, Tree Branch 10 highlights the importance of considering the constructional properties of dress, and its impact on associations, context, and intended audience. Particularly, Phersu's distinctive dress composition, which prompts forthright realisation on the display of painted dress as an intentional form of non-verbal communication. Its consistent sartorial and iconographical composition implies Phersu's fixed space and place, and thus an attempt to more rigidly structure depiction and reconcile the myriad complexities of funerary events (see Brandt, 2015: 113).

Table 31: Tree Branch 10 (see Fig. 3.13)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
10a	C_Type_3 C_Type_40 C_Type_91 C_Type_76 C_Type_0 C_Type_58 C_Type_49 C_Type_22 C_Type_52 C_Type_77 C_Type_44	N/A	N/A

Table 31: Tree Branch 10 (see Fig. 3.13)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
10b.i	N/A	C_Type_22 C_Type_52 C_Type_77 C_Type_44	N/A
10c.i	N/A	N/A	C_Type_3 C_Type_40 C_Type_91 C_Type_76
10c.ii	N/A	N/A	C_Type_22 C_Type_52 C_Type_77

Table 32: Tree Branch 10 - Clothing & Adornment Type Group Replication

Similarity Measure	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Fair Match (50%)	Poor Match (25%+)	N/A	Fair Match (50%)
Jaccard	Fair Match (50%)	Poor Match (25%+)	N/A	Fair Match (50%)
Kulczynski	Poor Match (25%+)	Poor Match (25%)	N/A	Poor Match (25%+)
Ochiai	Poor Match (25%+)	Poor Match (25%+)	N/A	Good Match (75%+)
Raup-Crick	Poor Match (25%+)	No Match (0%+)	N/A	N/A
Simpson	Poor Match (25%+)	No Match (0%+)	N/A	Poor Match (25%)
Euclidean	N/A	N/A	Poor Match (25%)	N/A

Table 33: Tree Branch 10 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
10a	C_Type_3 C_Type_40 C_Type_91 C_Type_76 C_Type_0 ~~C_Type_58~~ C_Type_49 ~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	C_Type_3 C_Type_40 ~~C_Type_91~~ C_Type_76 C_Type_0 ~~C_Type_58~~ ~~C_Type_49~~ C_Type_22 ~~C_Type_52~~ C_Type_77 ~~C_Type_44~~	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76 C_Type_0 C_Type_58 ~~C_Type_49~~ ~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76 C_Type_0 ~~C_Type_58~~ ~~C_Type_49~~ ~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ C_Type_44

Table 33: Tree Branch 10 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
10b.i	C_Type_22 C_Type_52 C_Type_77 C_Type_44	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ ~~C_Type_44~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~ C_Type_44
10c.i	C_Type_3 C_Type_40 C_Type_91 C_Type_76	~~C_Type_3~~ C_Type_40 ~~C_Type_91~~ C_Type_76	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ ~~C_Type_76~~	~~C_Type_3~~ ~~C_Type_40~~ ~~C_Type_91~~ C_Type_76
10c.ii	C_Type_22 C_Type_52 C_Type_77	C_Type_22 ~~C_Type_52~~ C_Type_77	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~	~~C_Type_22~~ ~~C_Type_52~~ ~~C_Type_77~~

3.12 - Tree Branch 11

Tree Branch 11 (see Table. 34) is composed of C_Type_2, a mantle wrapped around the waist, C_Type_87, a necklace, C_Type_16, a tunic, C_Type_17, a mantle, C_Type_4, a frilled loincloth, C_Type_32, an elaborate mantle draped over one shoulder, C_Type_53, a helmet, and C_Type_69 a curly hairstyle with ringlets. Its groupings are found in the 5th century BC, and it is associated with the same human *other* content types as Tree Branch 5 and the same colours and patterns *other* content types as Tree Branch 10. Tree Branch 11's key associations include kalpe, biga, chariot, chariot race, canopy, lotus bud and pomegranate frieze, mensola frieze, ribbon bow, pomegranate frieze, stand (for spectators), statue, and Hermes. They also include hetaira, lyre player, pole jumper, athlete, wrestler, young, old, judge/epistates, boxer, discobolos, trainer, male, runner and Agnothetes. Tree Branch 11 exemplifies the versatility and malleability of the results generated by clustering the Tarquinian tomb paintings according to their depictions of dress. Tree Branch 11's association with a myriad of *other* content types and clothing and adornment types fosters acknowledgement of the interaction between and across tree branches, which simultaneously emphasises context as key (see Lee, 2015: 24).

The properties, or typology, of the clothing and adornment types, provide their distinguishing elements (see Eicher & Roach-Higgins, 1992; also Gleba, 2012: 55). Their typology, alongside their *other* content type associations, is what facilitates access to their wider context. The typological distinction of 'active' and 'inactive' connects to the associated *other* content types, and also builds the surrounding narrative context. For example, the active participants of Tree Branch 11 at their implied funerary event could wear C_Type_53, C_Type_16 and C_Type_4. However, those who are observing, or who are partaking within more relaxed or sedate aspects of the event, could wear C_Types_2, C_Type_87, and C_Type_32. Furthermore, a hetaira could wear C_Type_87, and a lyre player C_Type_32, whilst a wrestler could be naked, a pole jumper

and athlete could wear C_Type_16, a runner wear C_Type_17, and a chariot racer wear C_Type_53. The ringlet/curled hair (C_Type_69) is more difficult to contextualise, as its properties are applicable to either an active or inactive participation. The wider context is only accessible when considering how the clothing and adornment types fit together amidst their assemblage, which is prescribed by their *other* content type associations. Tree Branch 11 highlights hierarchical clustering's and dress's complementary mechanisms, as both coalesce to piece together tomb painting as a form of sartorial linguistics with measurable, quantifiable, and contextual attributes. They provide tools through which to explore painted dress, its properties, and to connect it to painted bodies, and their spaces and places of activity or inactivity.

Table 34: Tree Branch 11 (see Fig. 3.14)

Group	0.50 - 0.70	0.80 - 0.95	0.96 - 1
11a	C_Type_2 C_Type_87 C_Type_16 C_Type_17 C_Type_4 C_Type_32 C_Type_53 C_Type_69	N/A	N/A
11b.i	N/A	C_Type_2 C_Type_87 C_Type_16 C_Type_17 C_Type_4	N/A
11c.i	N/A	N/A	C_Type_2 C_Type_87 C_Type_16 C_Type_17
11c.ii	N/A	N/A	C_Type_32 C_Type_53 C_Type_69

Table 35: Tree Branch 11 - Clothing & Adornment Type Group Replication

Similarity Measure	Complete Linkage	Single Linkage	Wards Method	UPGMA
Dice	Good Match (75%)	Poor Match (25%)	N/A	Good Match (75%)
Jaccard	Good Match (75%)	Fair Match (50%)	N/A	Fair Match (50%+)
Kulczynski	Good Match (75%)	Poor Match (25%+)	N/A	Fair Match (50%+)
Ochiai	Good Match (75%)	Good Match (75%)	N/A	Good Match (75%)

Table 35: Tree Branch 11 - Clothing & Adornment Type Group Replication				
Similarity Measure	**Complete Linkage**	**Single Linkage**	**Wards Method**	**UPGMA**
Raup-Crick	Good Match (75%)	Perfect Match (100%)	N/A	N/A
Simpson	Good Match (75%+)	Perfect Match (100%)	N/A	Good Match (75%+)
Euclidean	N/A	N/A	Good Match (75%)	N/A

Table 36: Tree Branch 11 - Chronology

Group	6th Century BC	5th Century BC	4th Century BC	3rd Century BC
11a	C_Type_2 ~~C_Type_87~~ ~~C_Type_16~~ C_Type_17 ~~C_Type_4~~ C_Type_32 ~~C_Type_53~~ ~~C_Type_69~~	C_Type_2 C_Type_87 C_Type_16 C_Type_17 C_Type_4 C_Type_32 C_Type_53 C_Type_69	~~C_Type_2~~ ~~C_Type_87~~ C_Type_16 ~~C_Type_17~~ ~~C_Type_4~~ C_Type_32 C_Type_53 ~~C_Type_69~~	~~C_Type_2~~ ~~C_Type_87~~ C_Type_16 ~~C_Type_17~~ ~~C_Type_4~~ C_Type_32 ~~C_Type_53~~ ~~C_Type_69~~
11b.i	C_Type_2 ~~C_Type_87~~ ~~C_Type_16~~ C_Type_17 ~~C_Type_4~~	C_Type_2 C_Type_87 C_Type_16 C_Type_17 C_Type_4	~~C_Type_2~~ ~~C_Type_87~~ C_Type_16 ~~C_Type_17~~ ~~C_Type_4~~	~~C_Type_2~~ ~~C_Type_87~~ C_Type_16 ~~C_Type_17~~ ~~C_Type_4~~
11c.i	C_Type_2 ~~C_Type_87~~ ~~C_Type_16~~ C_Type_17	C_Type_2 C_Type_87 C_Type_16 C_Type_17	~~C_Type_2~~ ~~C_Type_87~~ C_Type_16 ~~C_Type_17~~	~~C_Type_2~~ ~~C_Type_87~~ C_Type_16 ~~C_Type_17~~
11c.ii	C_Type_32 ~~C_Type_53~~ ~~C_Type_69~~	C_Type_32 C_Type_53 C_Type_69	C_Type_32 C_Type_53 ~~C_Type_69~~	~~C_Type_32~~ ~~C_Type_53~~ ~~C_Type_69~~

3.13 - Validation Technique Results

Cophenetic Correlation: The cophenetic correlations for each of the dendrogram's output by the clustering procedure for the ALL chronology are presented below:

Table 37: Cophenetic Correlation Results	
All Chronology Dendrogram's	**Cophenetic Correlation**
C&A_Chron=all_UPGMA_RaupCrick	0.5
Colour_Chron=all_UPGMA_RaupCrick	0.5
Cultural_Chron=all_UPGMA_RaupCrick	0.4

Table 37: Cophenetic Correlation Results	
All Chronology Dendrogram's	**Cophenetic Correlation**
Human_Chron=all_UPGMA_RaupCrick	0.5
Natural_Chron=all_UPGMA_RaupCrick	0.4
Patterns_Chron=all_UPGMA_RaupCrick	0.4

Replication - the results of replicating the clustering process using different algorithms and similarity measures have been presented alongside the clothing and adornment type groups for each tree branch.

Significance tests on variables used to create clusters - it was not possible to perform significance tests on the variables used to create the clusters due to the inclusion of all null rows within the data matrix.

Testing for an absence of structure - testing did not identify an absence of clusters within the data matrix.

Rearranging the data-matrix - the data-matrix was rearranged to match the hierarchical groupings output by the clustering analysis, and this reinforced the nested hierarchical structures of Tree Branch 1 through to Tree Branch 11. The organisation of the data-matrix in this way highlighted the inter-object similarities, and confirmed the accuracy of the similarities suggested by the dendrogram's (Romesburg, 1984: 24). The rearrangement of the data-matrix assisted in presenting the results and helped to identify key classifications within the clusters.

3.14 - Summary

Tree Branch 1 through to Tree Branch 11 represent the clothing and adornment type classifications identified through the hierarchical clustering analysis, which is a statistical tool designed to identify such classificatory clusters (see Cavanagh, 1987: 162). A tree branches' individual groupings illustrate the weaker, and the stronger, classificatory arrangements of clothing and adornment types depicted within and throughout Tarquinian tomb painting. Each tree branch and their groupings are associated with a myriad of different *other* content type associations that help provide them with meaning and contextualisation. Tree branches and their groupings identify how the different clothing and adornment types fit together, or not, and they express the underlying Tarquinian painted sartorial ordering principles (see Wendrich, 2013: 86). Furthermore, rather than merely 'putting things in order' to provide new insight (Wendrich, 2013: 88), the clothing and adornment types assist in elucidating their effect and affect on their viewers and wearers via their articulated constructional properties. This effect and affect can be reconciled,

or not, with the clothing and adornment types *other* content type associations, and their wearer's likely identity, context, or characterisation. The clothing and adornment type groupings reflect the 'insider view' (Ferraro, 2007: 17), as they define Tarquinian perception according to their own recognisable painted sartorial terms. They do not reflect an 'outsider view' (Ferraro, 2007: 17), which would utilise foreign categories and concepts as a means and mode of analysis contrary to innate Tarquinian cultural arrangements (see Brandt, 2015 for example).

Crucially, it is important to investigate how the tree branches offer meaning and significance (see Feldman, 2014: 337), what meaning and significance they offer, the effect of this meaning and significance, and the affect of this meaning and significance (see Colburn & Heyn, 2008). The tree branches present fluidity in the sartorial boundaries they identify; however, there are boundaries that are intractable. Amidst this dichotomous intractability and flexibility a social hierarchy, spatial position, and purpose is affirmed. Clothing and adornment types are not isolated within their branches, as the different tree branches can and do cross over and interact in significant ways. It is in these interactions, *other* content type associations, and crossovers between and across the tree branches, and clothing and adornment type groupings, that the combinations, compositions, fashions, or styles of the Tarquinian tomb paintings are contextualised.

Key reoccurring themes throughout the data-set have also been identified and presented in this chapter alongside their applicable statistically identified groupings of painted dress. These key themes are generically outlined below for clarification purposes, and they are explored in greater detail, together with examples drawn from the data (tree branches), in chapter 4 and 5:

i. The distinctive, different or mundane clothing and adornment type, which indicates the extent of their role as identifying markers, or signifiers, or how their properties effect considerations of association, context, and audience. This is linked to the idea of *what* clothing and adornment *means* through its constructional properties, when on a body, in a space, and occupying a place (see Colburn & Heyn, 2008).

ii. The intentional and specific display, manipulation, and use of clothing and adornment types as forms of non-verbal communication i.e. the signifier and signified in a given context, for a given audience, within a given set of associations. This is linked to the idea of the 'effect' of dress and its function as a text or message — be it through duplicity, disguise, costume, or general forms of dress (see Gell, 1998; Tilley, 1991; Saussure, 1960; also Stone, 1965; and Goffman, 1976).

iii. The contrast between *active* and *inactive* clothing and adornment types i.e. the relationship of the clothing and adornment types to the bodies they adorn and how they affect their wearer. This is related to the idea of the affect of dress through its constructional or phenomenological properties (see Veblen, 2007; Summers, 2001; also Sorensen, 1997).

iv. The composition (or combination) of clothing and adornment types i.e. the language of dress and how its clothing and adornment types fit or go together. This is related to the idea of how dress presents meaning through the associative strength between its different clothing and adornment types (see Barthes, 1973; also Feldman, 2014: 337; and Sorensen, 1997).

v. The fluidity and variability of clothing and adornment types in expressing socio-cultural boundaries, spatial positioning, space, place, and wider societal implications (see Summers, 2001; also Lurie, 1981).

vi. The interaction and inter-changeability between different tree branches, clothing and adornment type groupings, and clothing and adornment types. This is related to the statistical workings of the clustering analysis (see Romesburg, 1984), but it also applies to ideas of 'how' the frequency and consistency of dressed entities impacts their creation of meaning (see Barthes, 1973).

vii. The inclusion or exclusion of clothing and adornment types and their *other* content type associations amongst individual groupings and/or tree branches. This is related to the idea of 'what' clothing and adornment means (see Colburn & Heyn, 2008), but also offers commentary on the methodological structures of the clustering analysis used to generate the results (see Romesburg, 1984).

viii. The flexible interpretation of clothing and adornment type groupings and their associations within a tree branch i.e. appropriate and informed contextualised attribution of *other* content types. This is related to the key theme of (un)expected effect or affect, and the variability of the non-verbal messages emitted through dress when considering the separation from their targeted ancient audiences (see Wobst, 1977). It too is also influenced by the inner statistical workings of the clustering analysis (Romesburg, 1984).

ix. The chronology of the tree branches and their groupings i.e. change or development through the 6th — 3rd/2nd centuries BC.

x. The use of statistical validation to assess the accuracy and reliability of the identified hierarchical tree branches and their interpretations.

xi. The reconciliation of the tree branches with social, political, and economic narratives.

This chapter presented the results of the hierarchical clustering analysis of clothing and adornment types from the painted tombs at Tarquinia. It made use of pictorial and tabular arrangements to transcribe the raw statistical outputs (dendrograms) into their more digestible, structured, coherent, and monolith groupings (tree branches). A tree branch's composite groupings

classify the different combinations, compositions, styles, and fashions of the dress depicted in the Tarquinian tomb paintings. They are the things that 'go together' (see Barthes, 1983), and each grouping acts as an individual locus of painted sartorial connectivity (see Clarke, 1978). Furthermore, as well as presenting the division of clothing and adornment types and their *other* content type associations into groupings, this chapter embedded the tree branches within previously discussed 'fashionological', communicative, phenomenological, material, and statistically methodological thematic frameworks.

Tree Branch 1 through to Tree Branch 11 illustrate the speech articulated through the language of painted dress, which can only be effectively deciphered through quantitatively identified arrangements organised by the UPGMA hierarchical clustering algorithm (Sokal & Michener, 1958) once measured by the Raup-Crick similarity index (Raup & Crick, 1979). Chapter 4 and 5 interpret this interplay between tomb painting, language, and dress, and both chapters are structured according to the painted dress groupings' relationship between their associative strength, frequency, and typology. Structurally, the tree branches and their groupings each manipulate similar reoccurring key themes, but they each do so according to differing ranges of associative strength, frequency, and typology. Therefore, the grouped compositional make-up of each tree branch offers significant indication of painted dress's utilisation as non-verbal communication. Particularly, those tree branches composed of groupings demonstrating a trend of typological regularity, high frequency, but weak associative strength, belong to the 6th – 5th century BC. Conversely, those composed of groupings demonstrating a trend of typological irregularity, low frequency, but strong associative strength, belong to the 4th – 3rd/2nd century BC. Consequently, the results presented in this chapter are explored in the following chapters according to their thematic and statistical disparities, which are suggestive of the shifting communicative values and utilization of painted dress from the Archaic to the Classical period.

3.15 - Key Figures

The following figures present the tree branch structure diagram and the tree branch crossover diagram (see Fig. 3.2 & Fig. 3.3). They illustrate each tree branches dress grouping structure, and the grouping's relationships to one another. The primary clothing and adornment type dendrogram derived irrespective of chronology is also presented (see Fig. 3.1). The proceeding figures also present the dendrograms of each *other* content type category, and the clothing and adornment type category, output by the UPGMA clustering algorithm and Raup-Crick similarity measure (see Fig. 3.16 - 3.20). So too are the pictorial translations of each tree branch presented (see Fig. 3.4 - 3.14). **Note**: 'C&A_Chron=all_UPGMA_RaupCrick' - this shorthand reference first defines category of type e.g. clothing and adornment type (C&A), chronology e.g. 5th century BC (Chron=all), clustering algorithm e.g. UPGMA, and similarity measure e.g. Raup Crick.

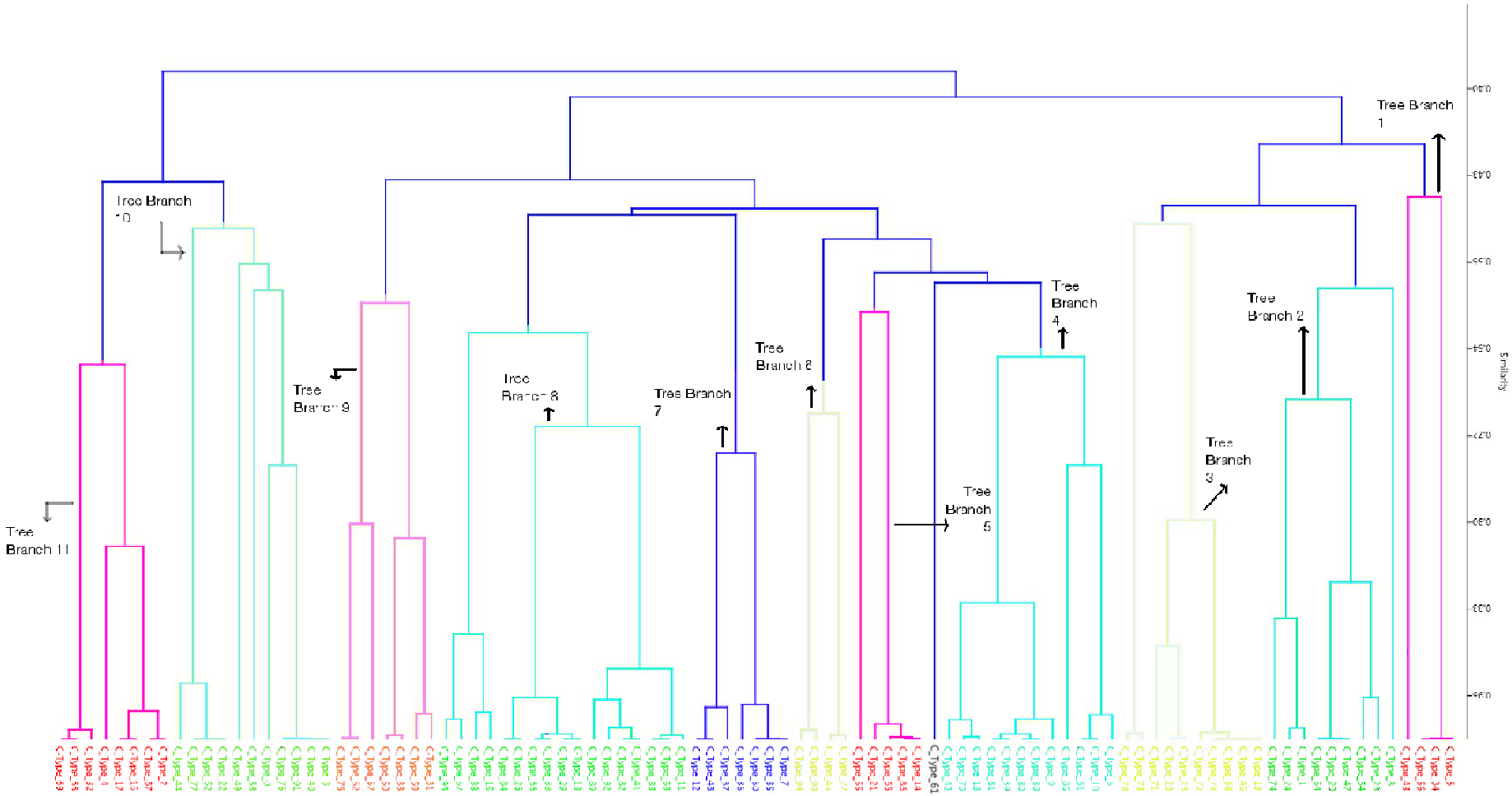


Fig. 3.1: C&A_Chron=all_UPGMA_RaupCrick.

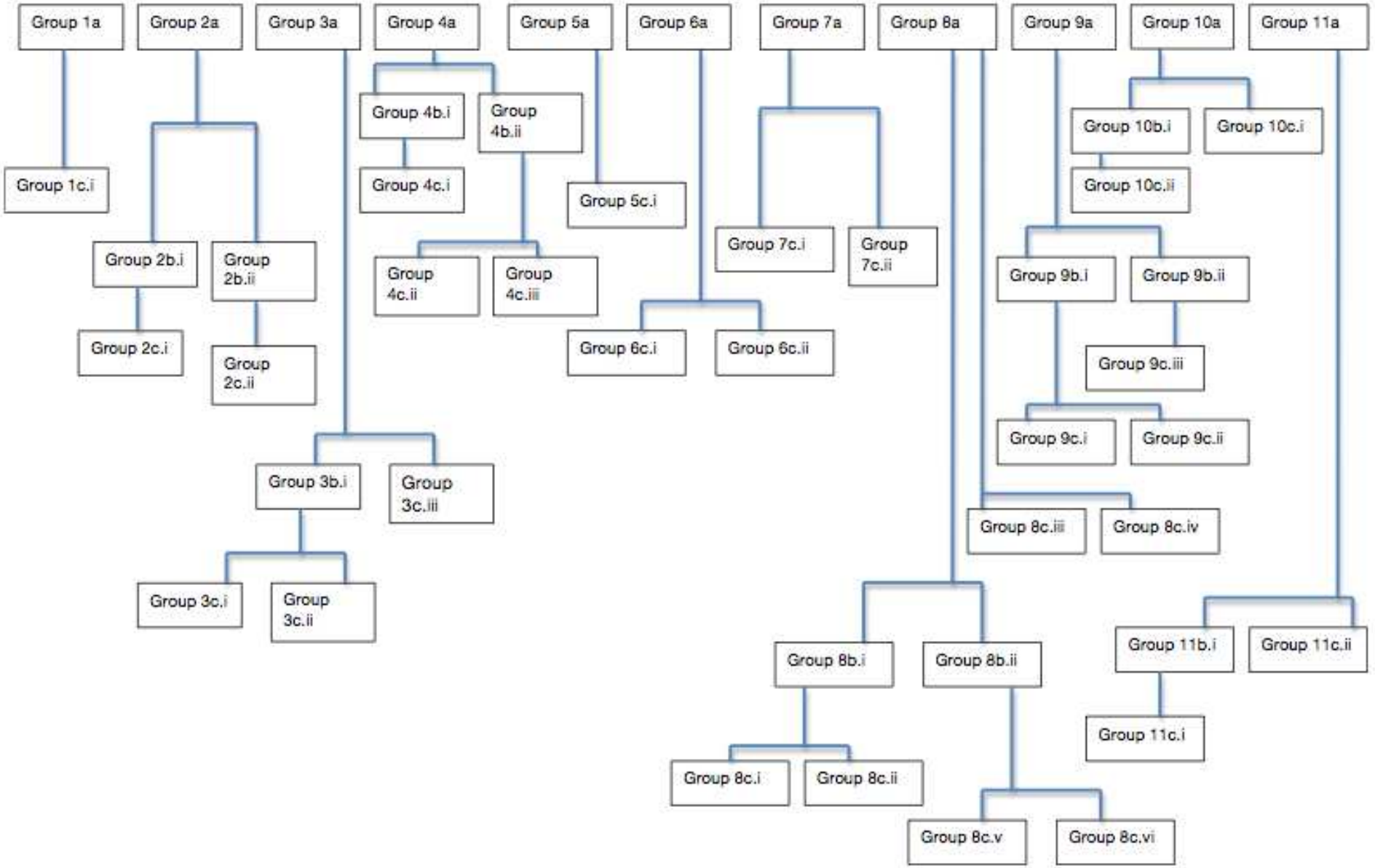
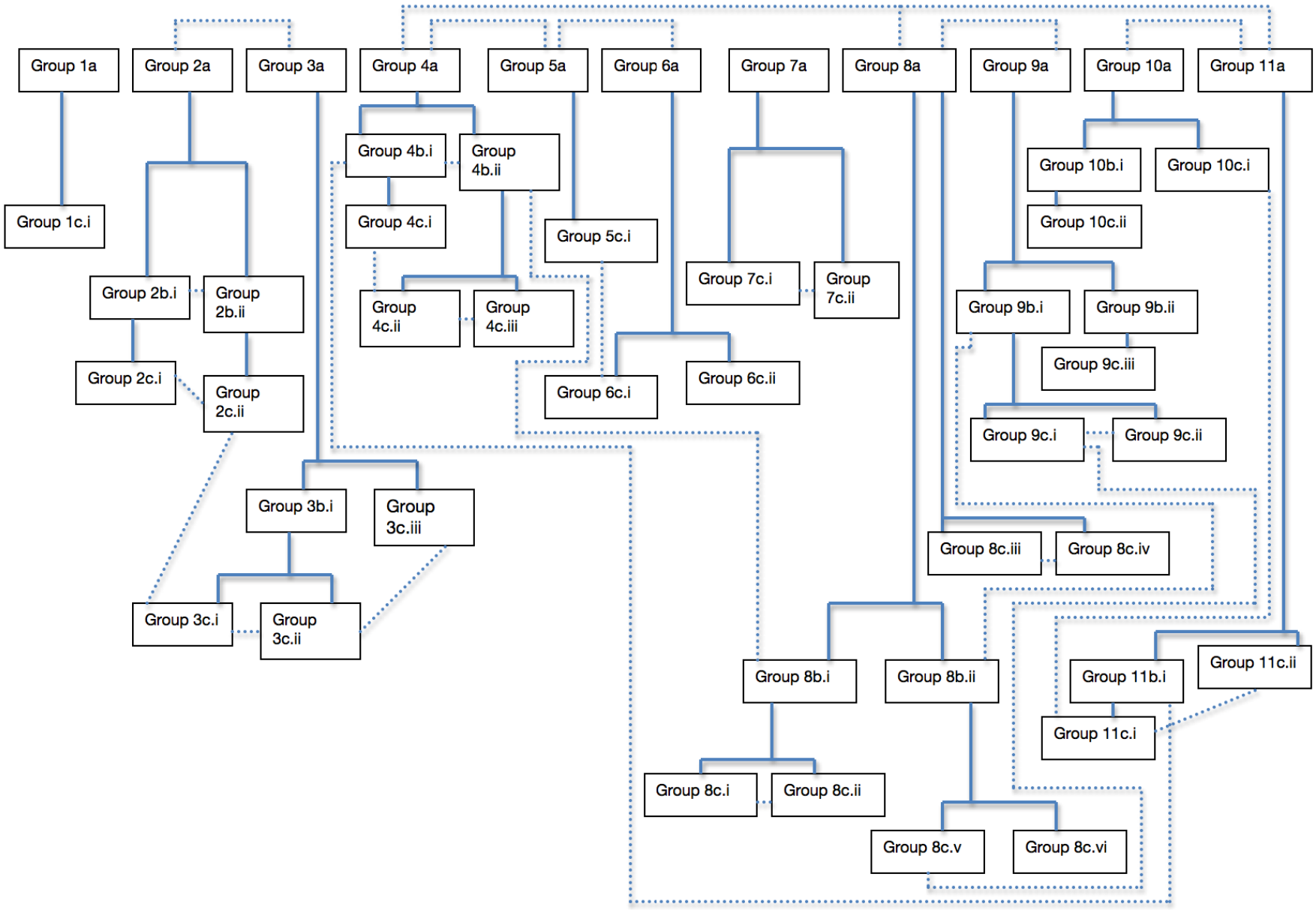
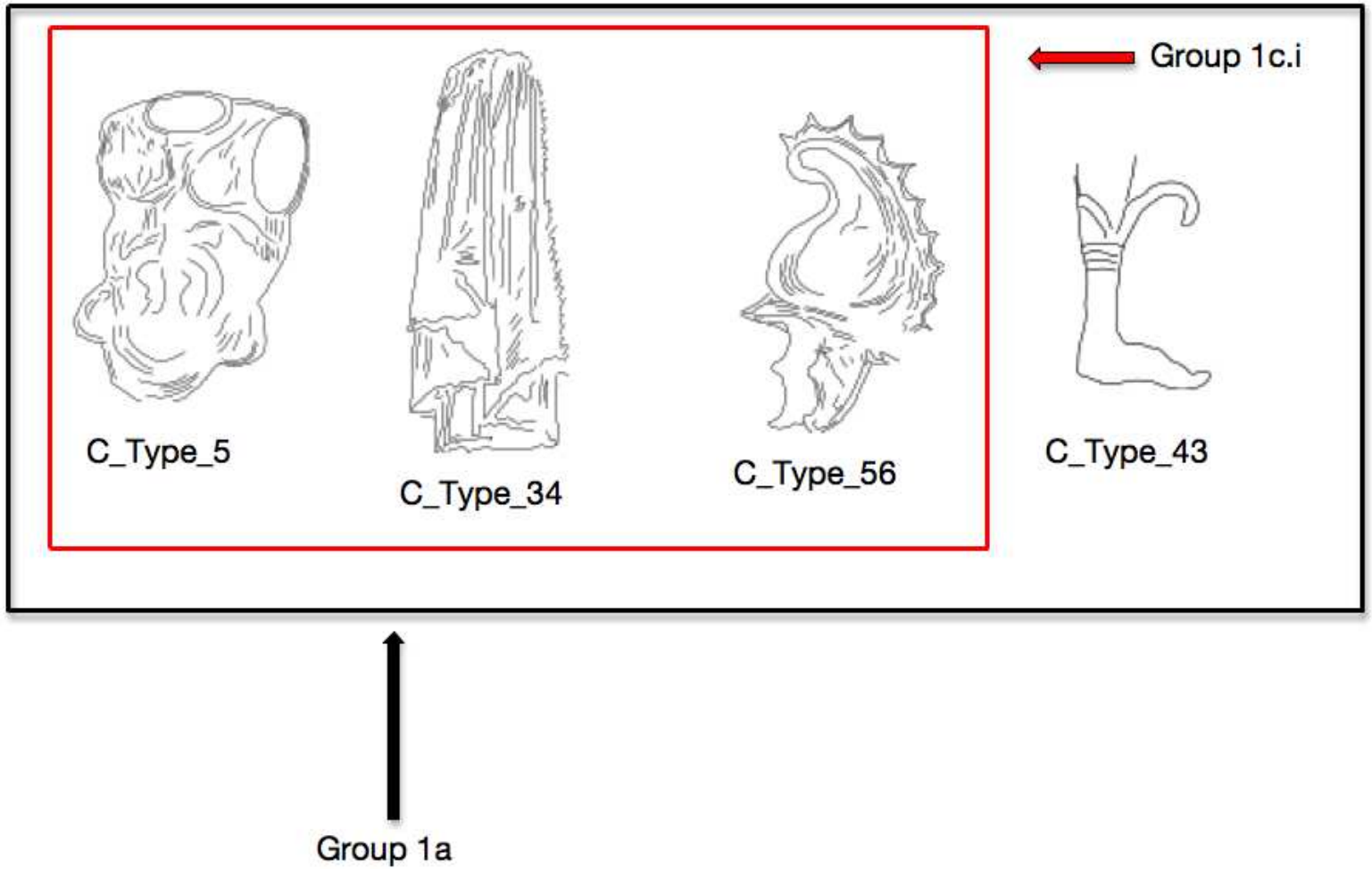


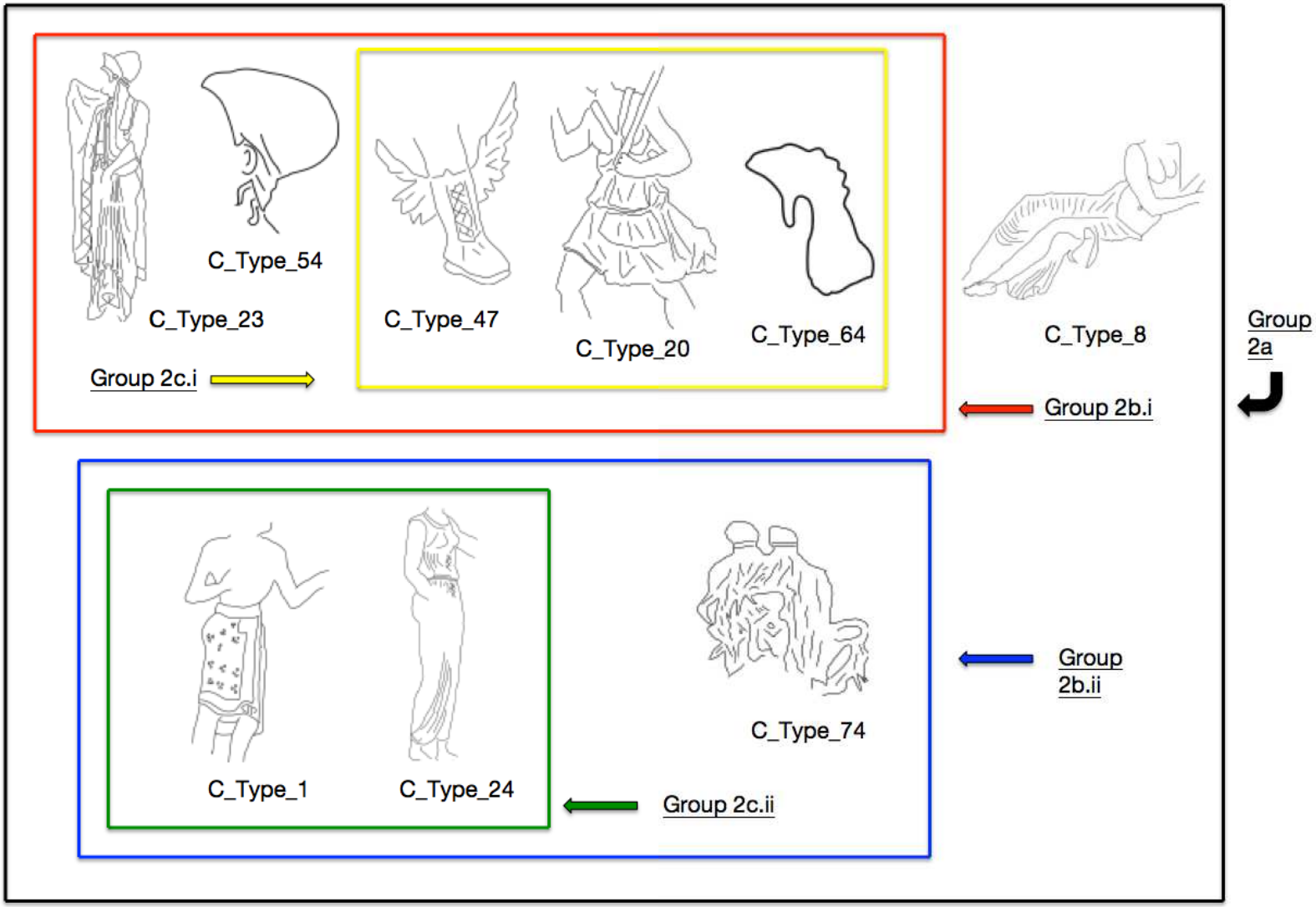
Fig. 3.2: Tree Branch Diagram.



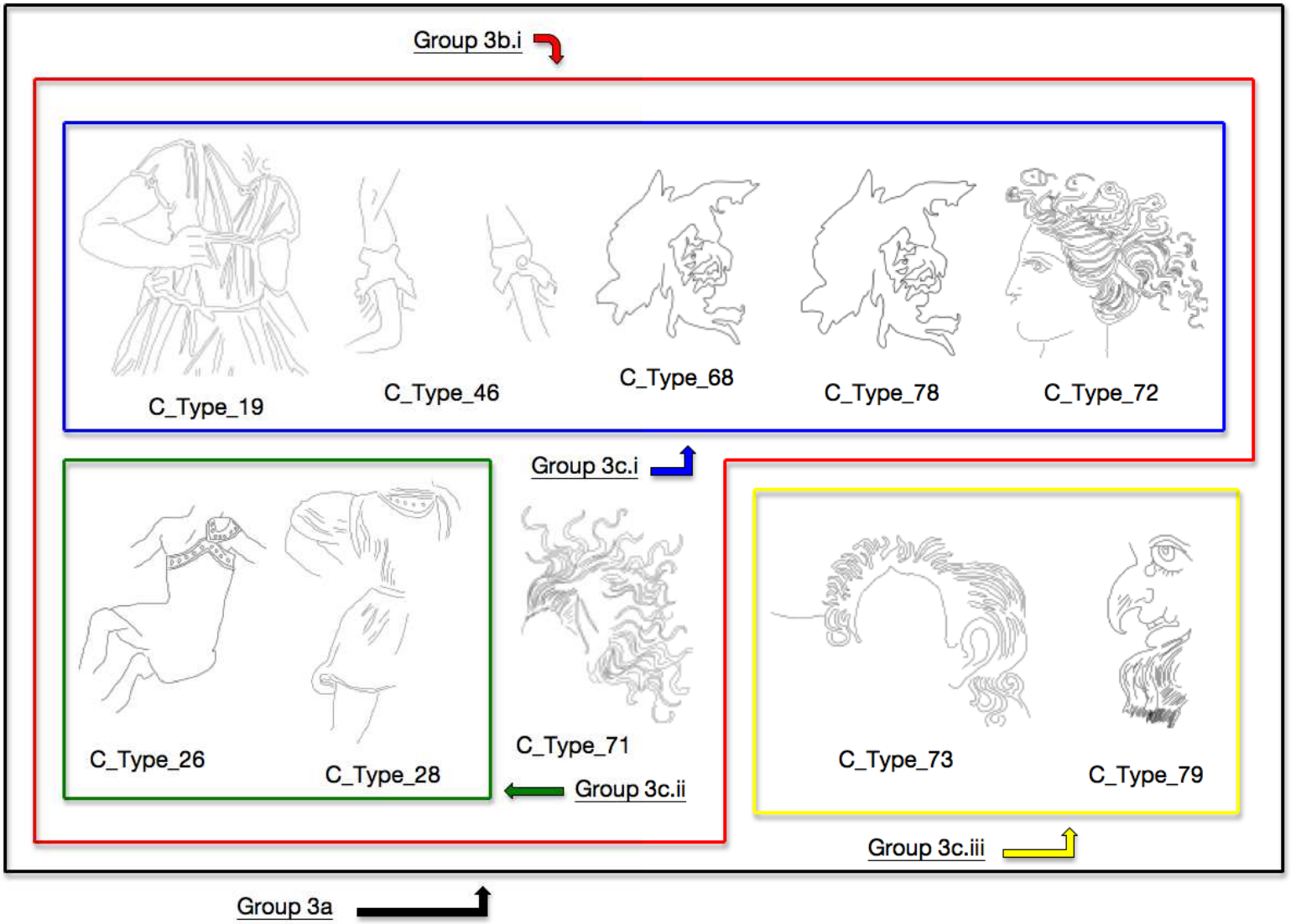
Fig, 3.3: Tree Branch Crossover Diagram.



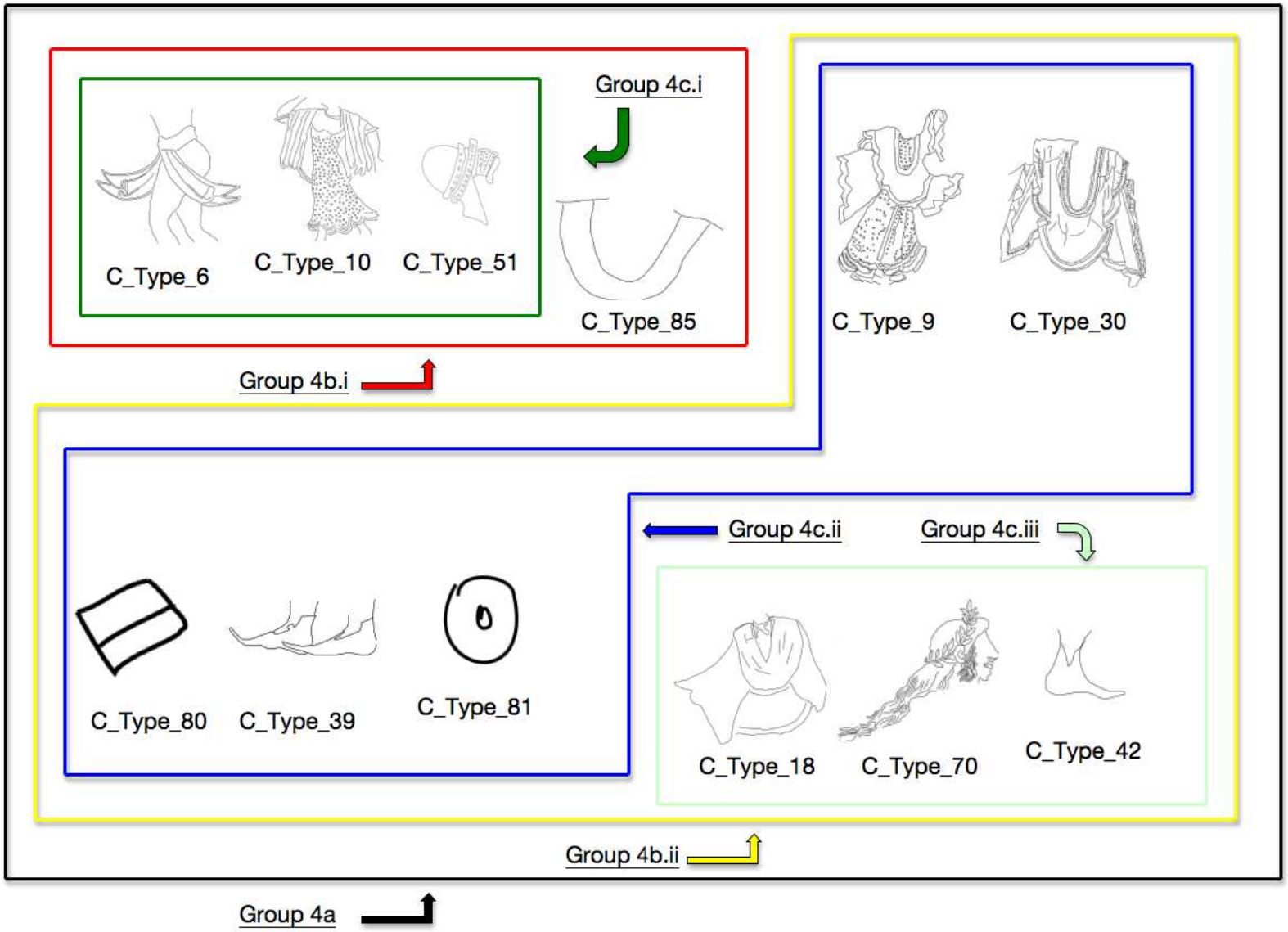
Fig, 3.4: Tree Branch 1.



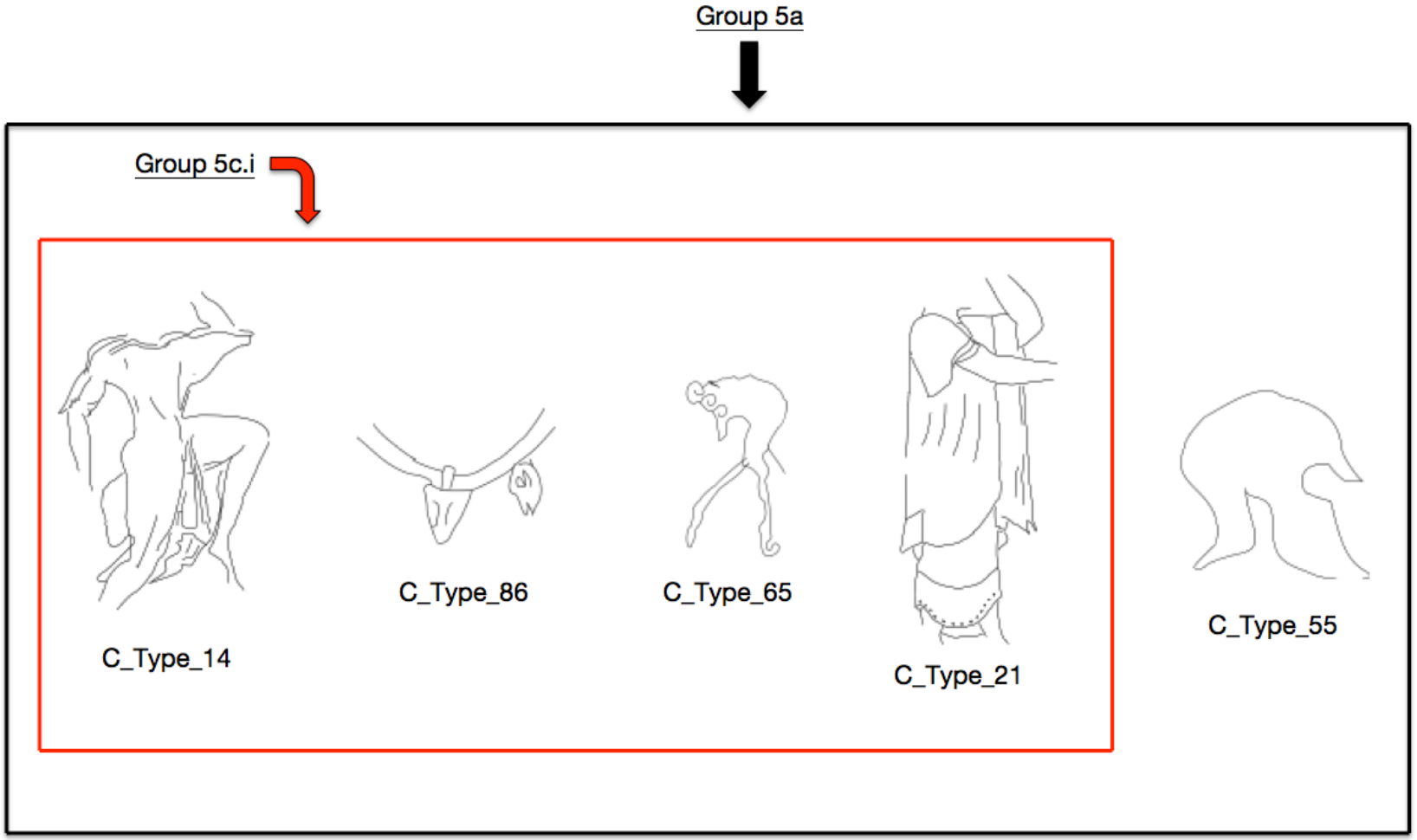
Fig, 3.5: Tree Branch 2.



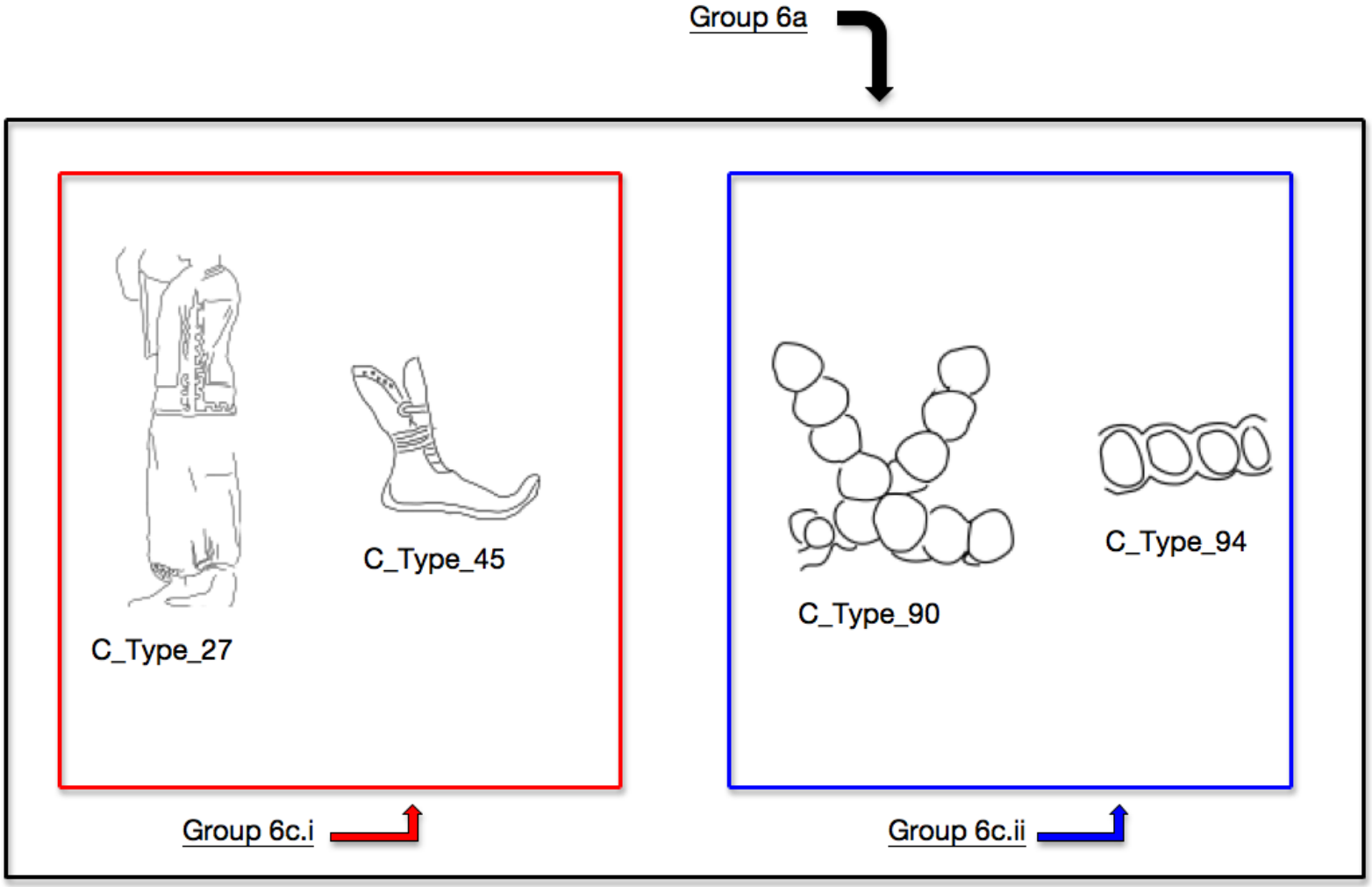
Fig, 3.6: Tree Branch 3.



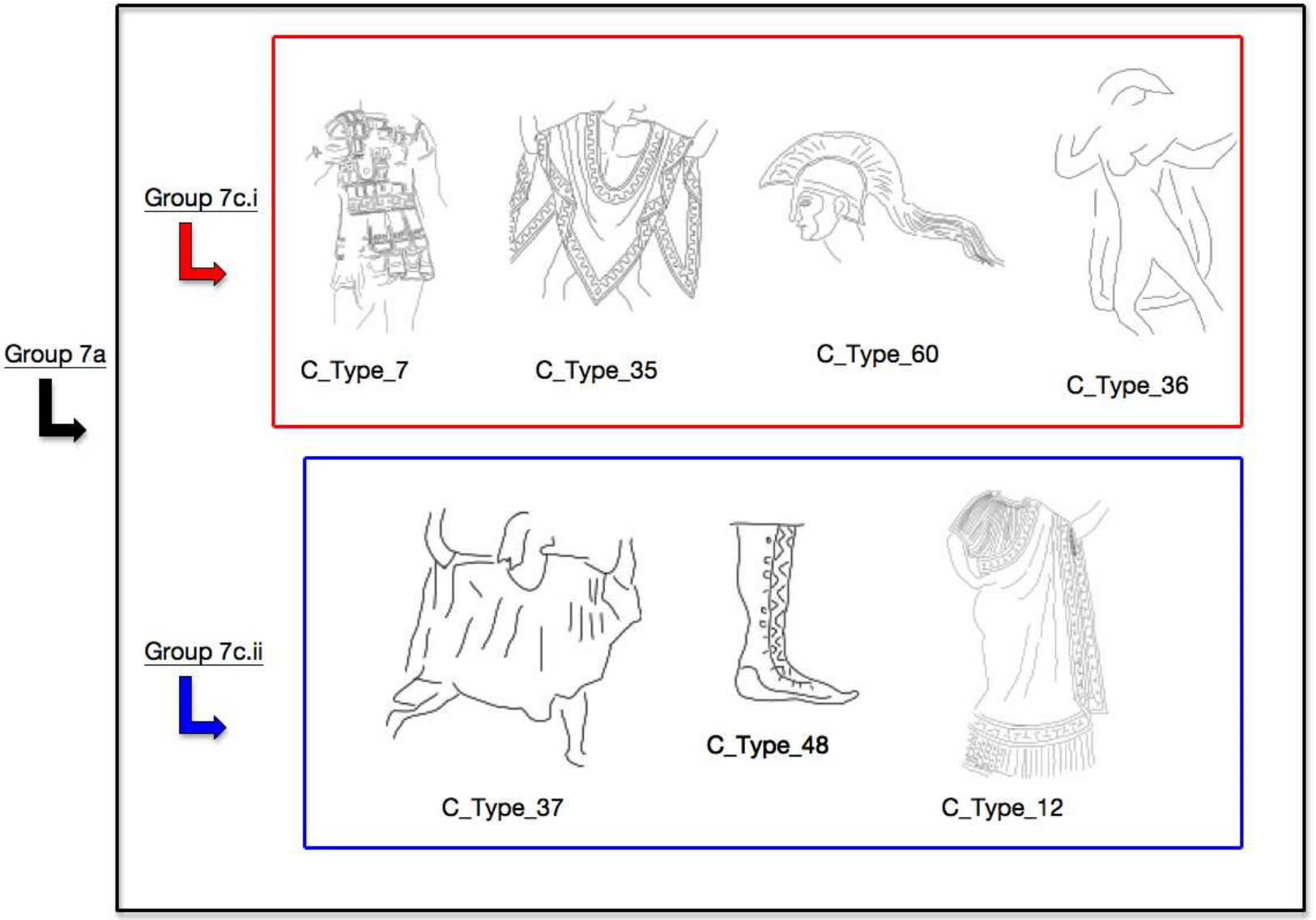
Fig, 3.7: Tree Branch 4.



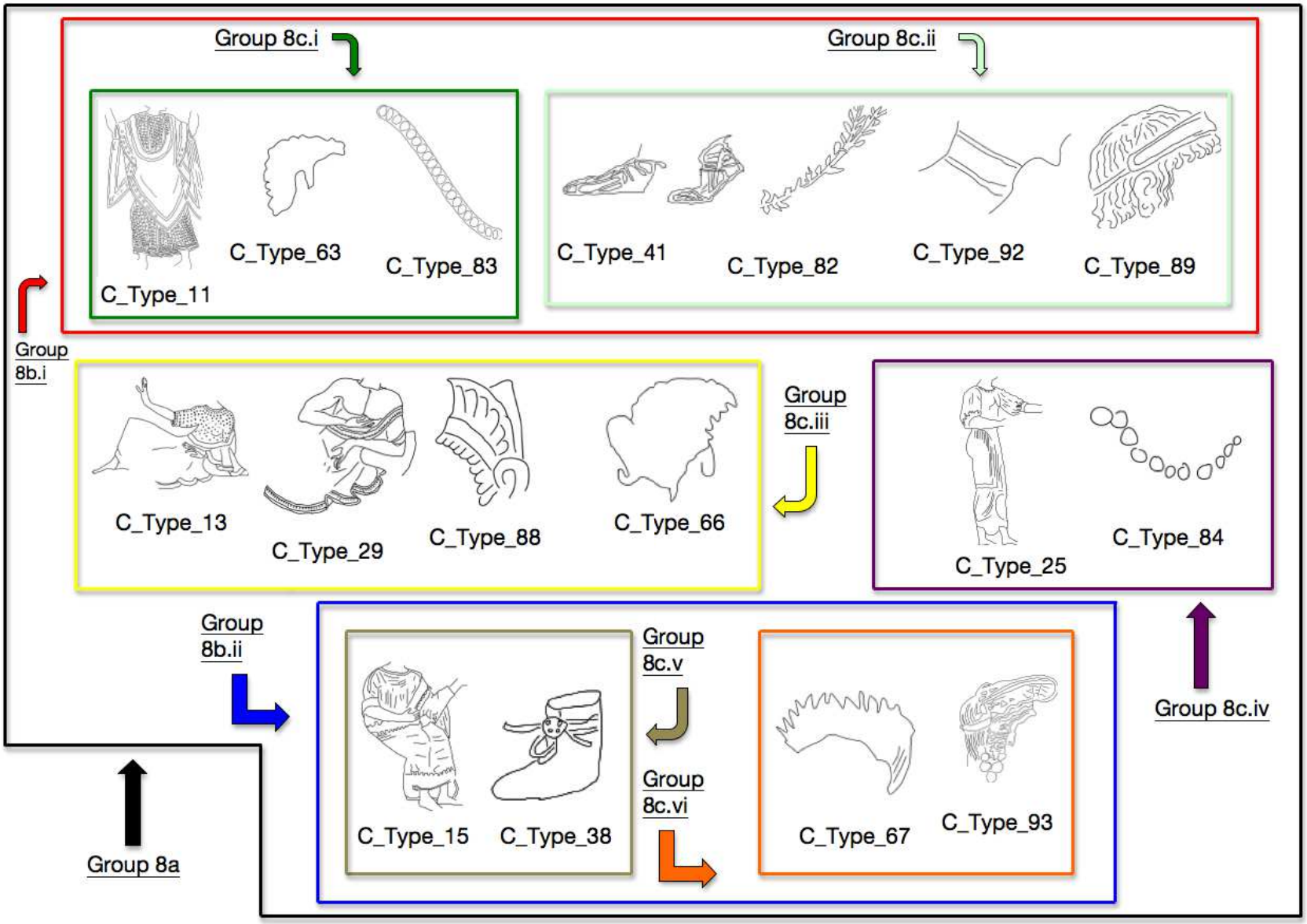
Fig, 3.8: Tree Branch 5.



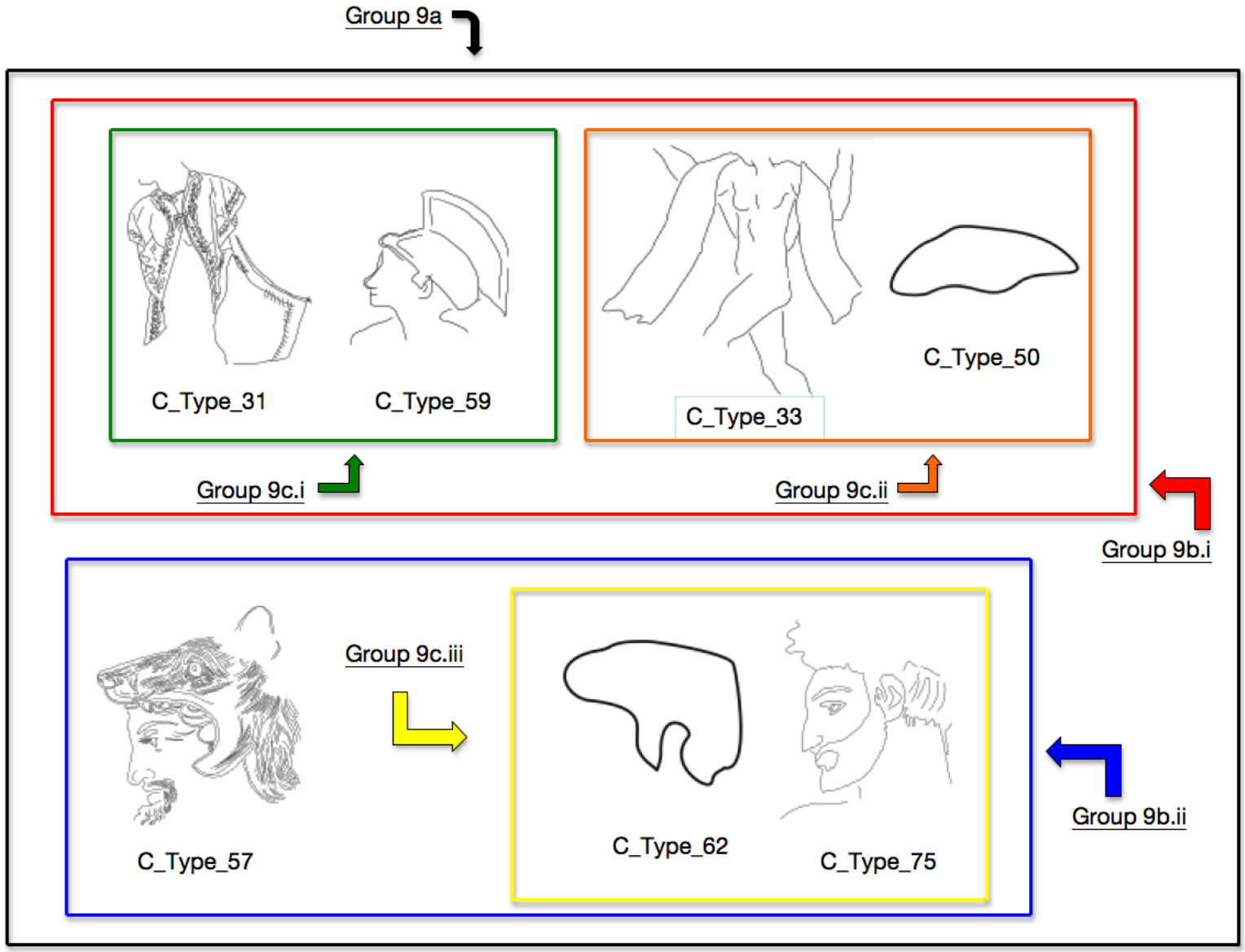
Fig, 3.9: Tree Branch 6.



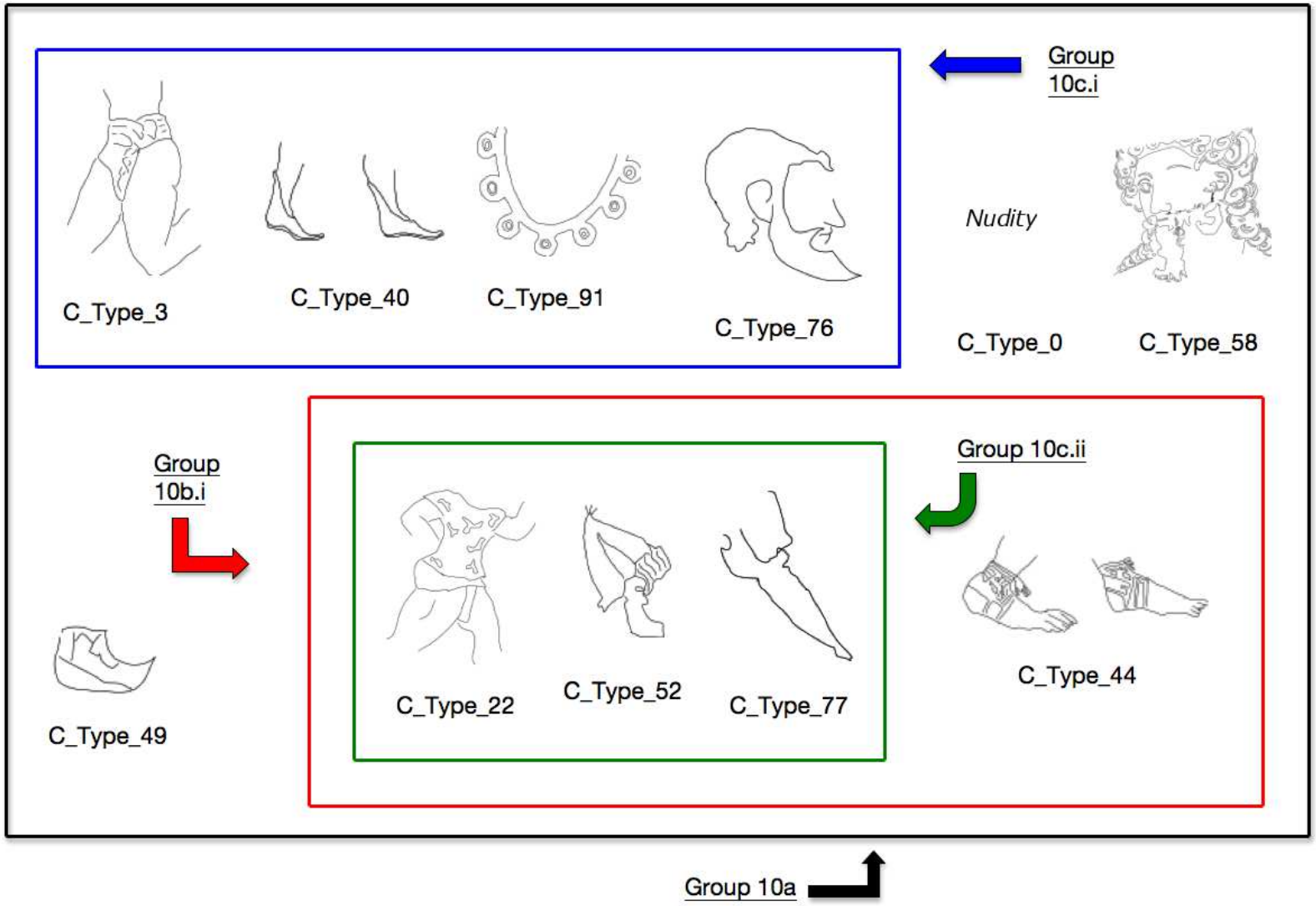
Fig, 3.10: Tree Branch 7.



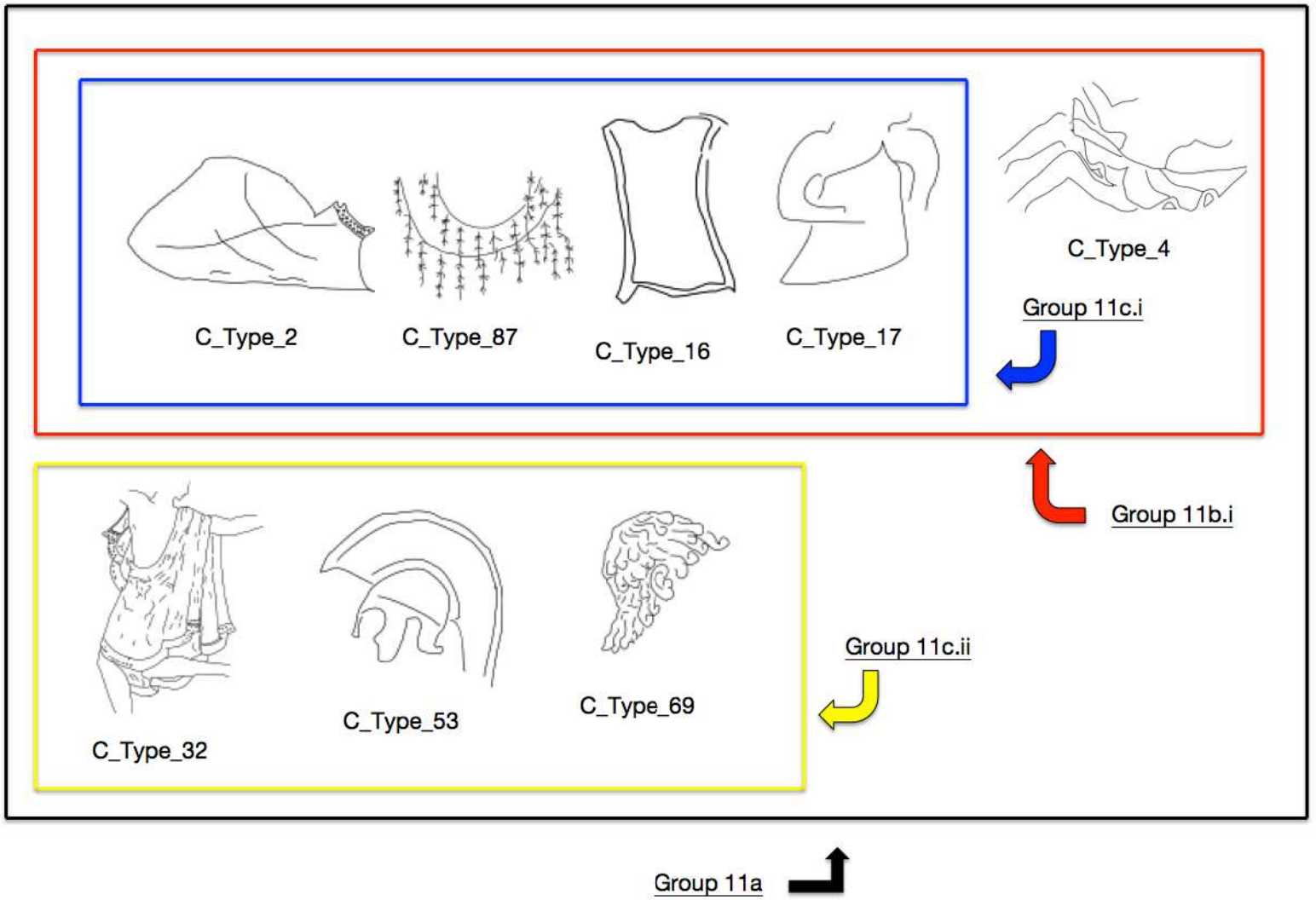
Fig, 3.11: Tree Branch 8.



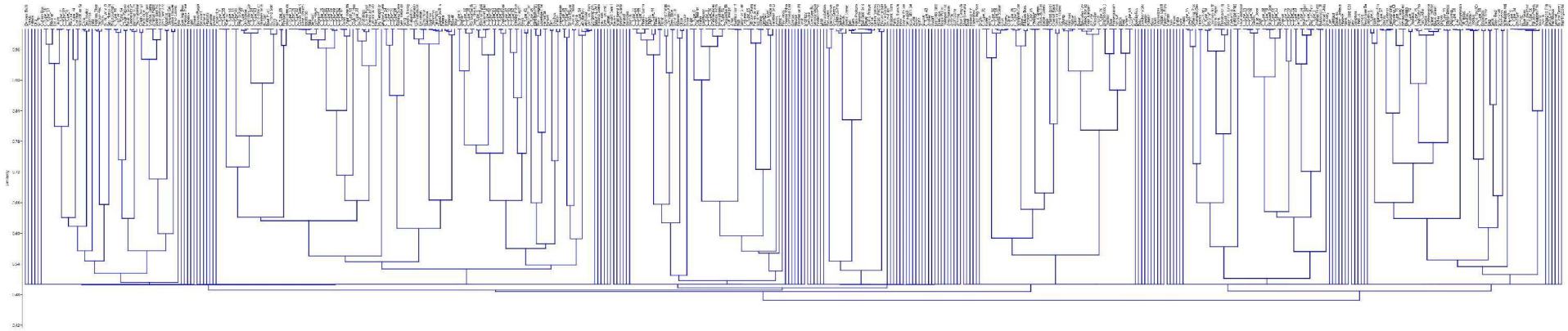
Fig, 3.12: Tree Branch 9.



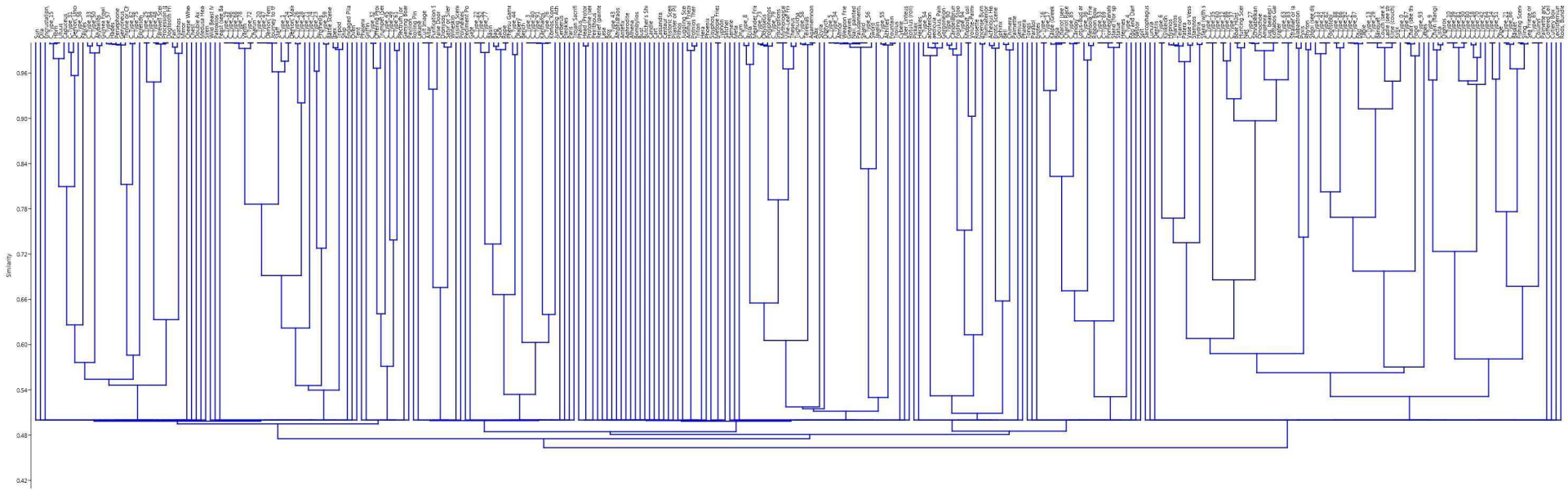
Fig, 3.13: Tree Branch 10.



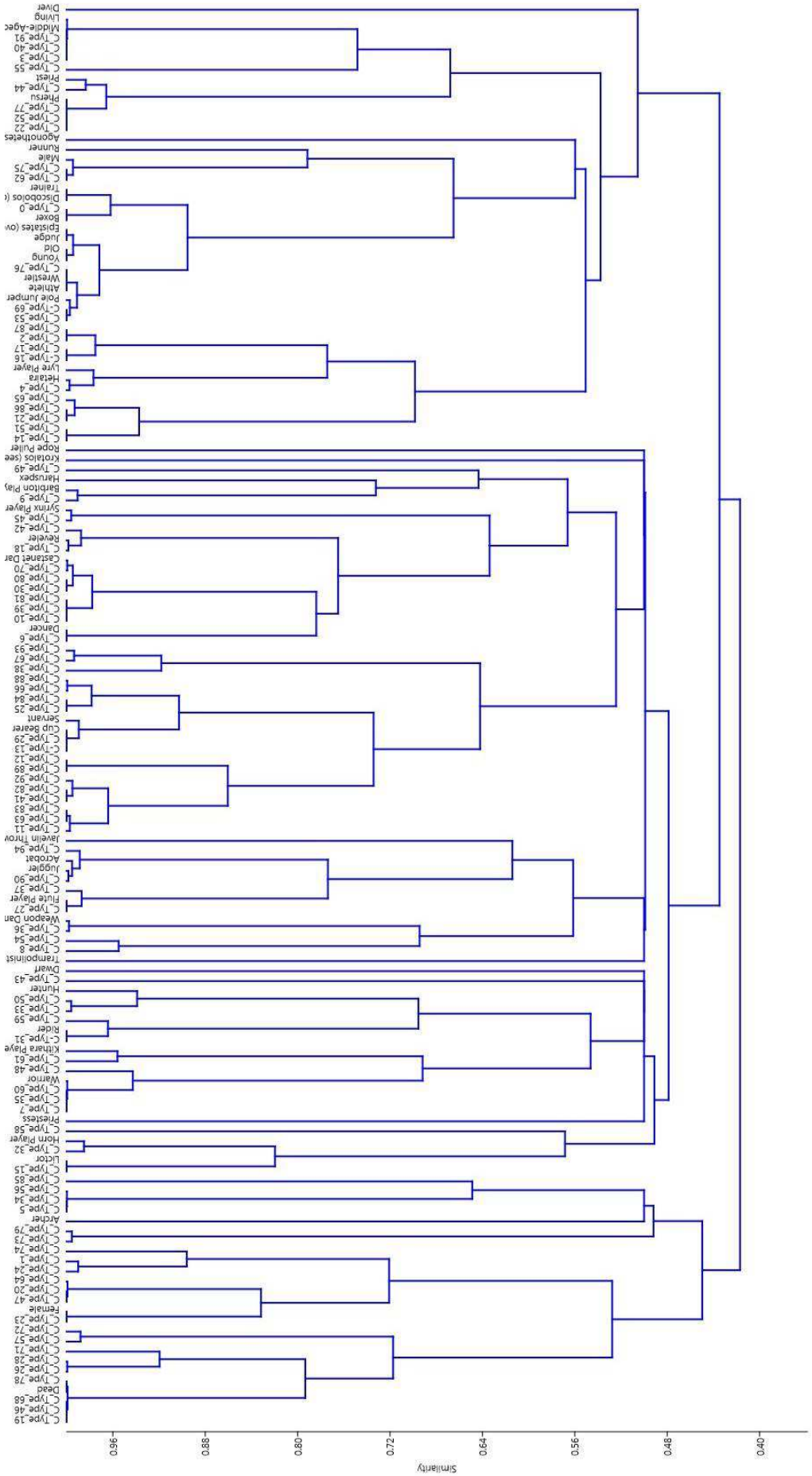
Fig, 3.14: Tree Branch 11



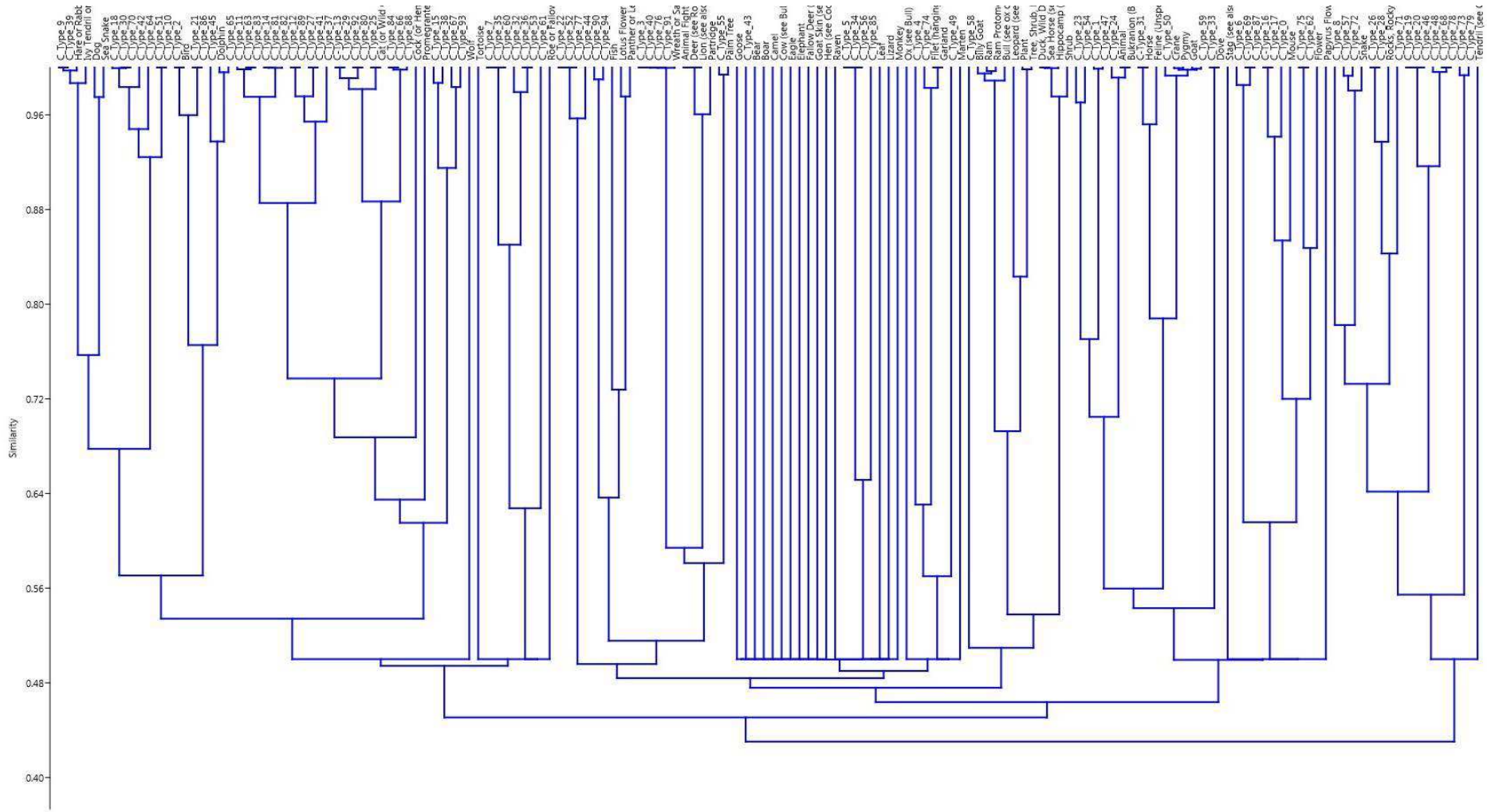
Fig, 3.15: ALL_Chron=all_UPGMA_RaupCrick.



Fig, 3.16: Cultural_Chron=all_UPGMA_RaupCrick.



Fig, 3.17: Human_Chron=all_UPGMA_RaupCrick.



Fig, 3.18: Natural_Chron=all_UPGMA_RaupCrick.

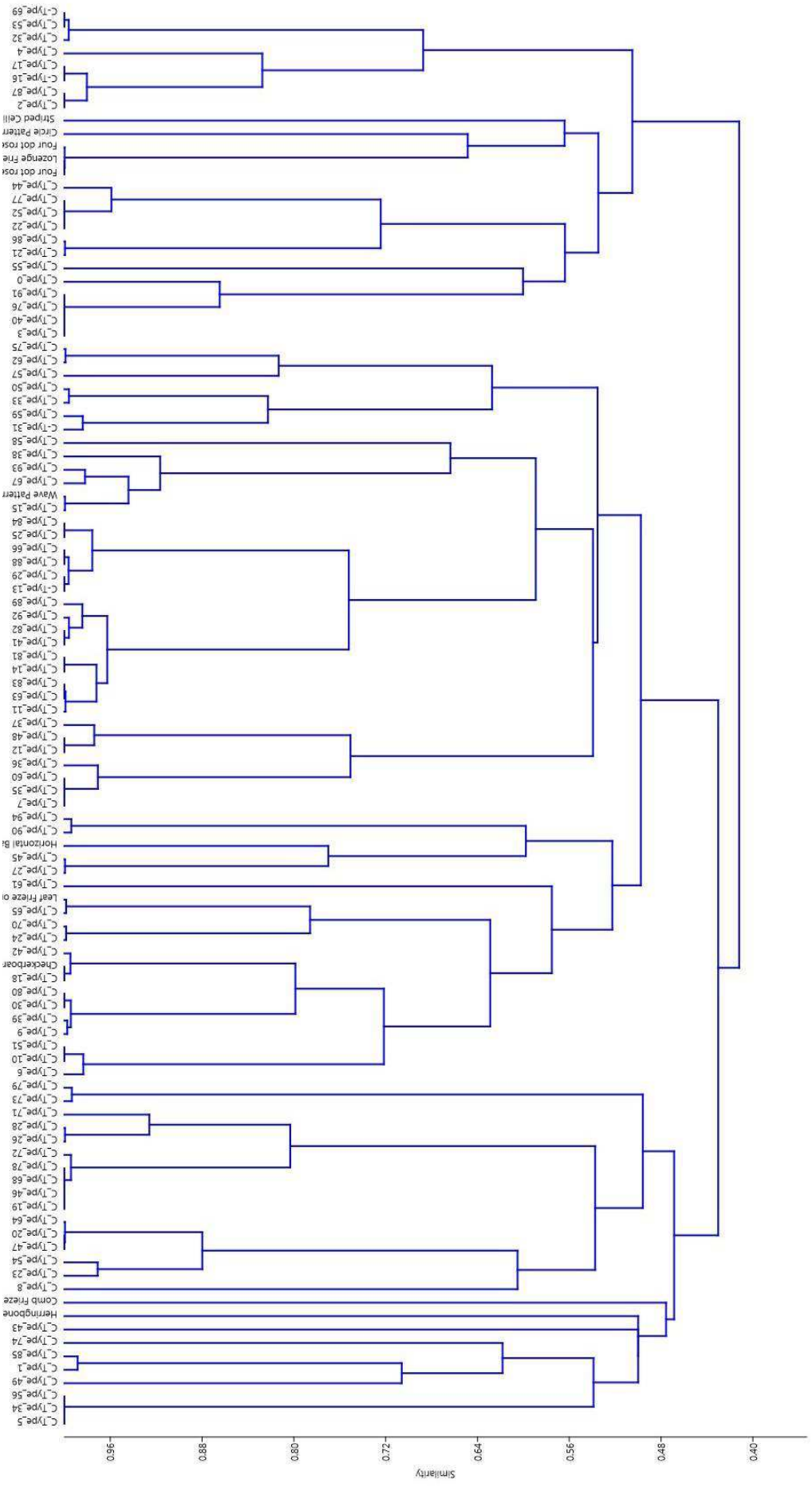
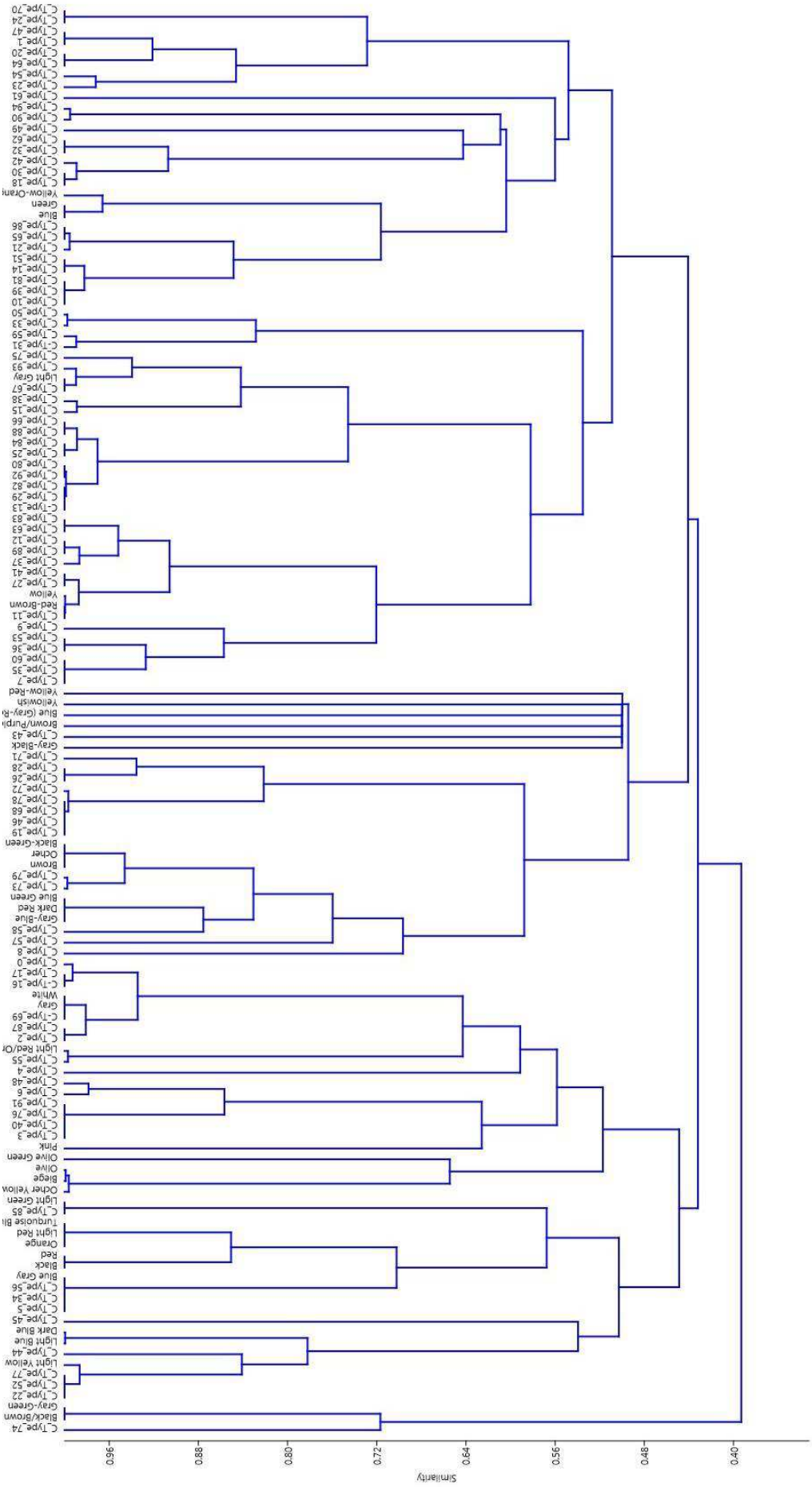
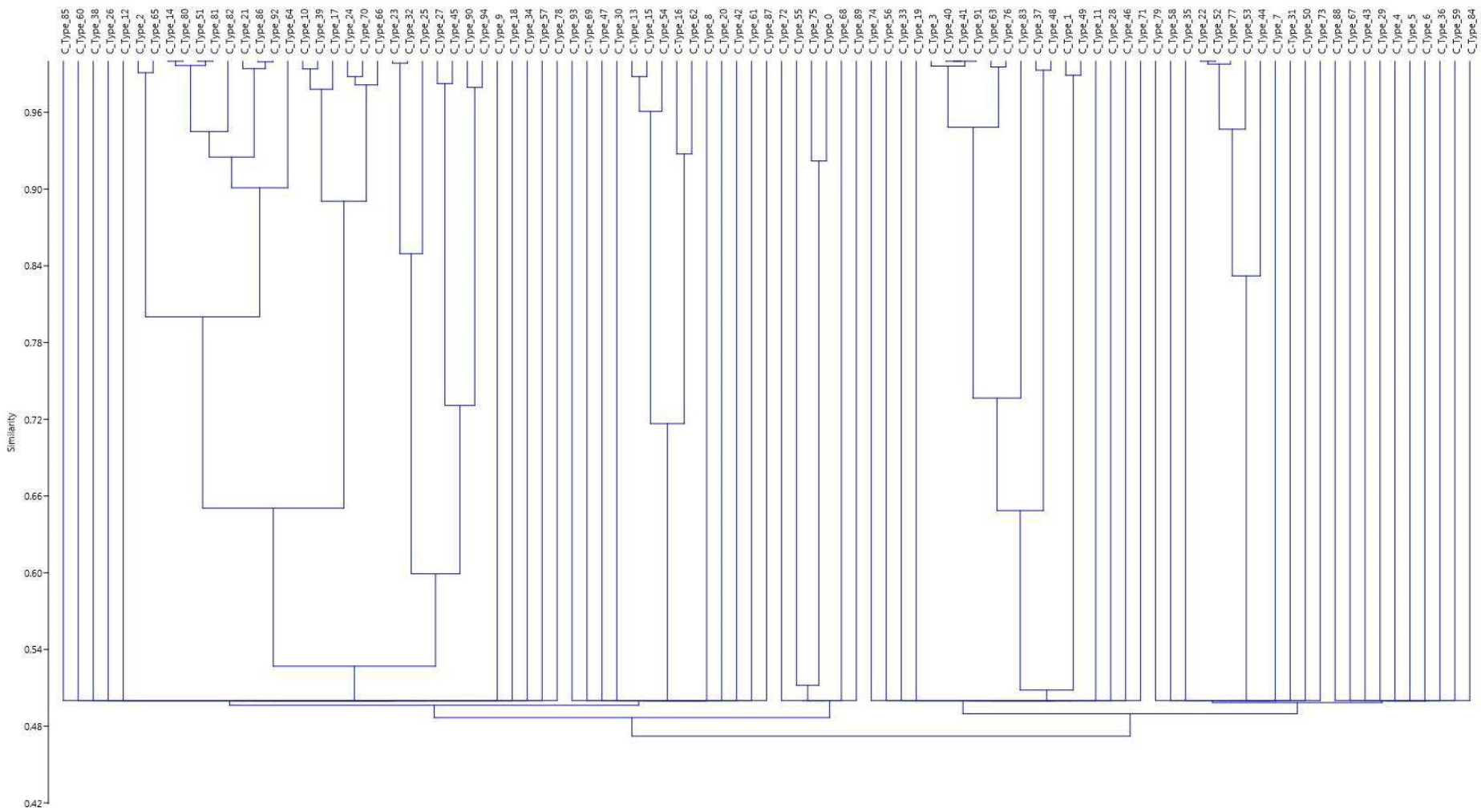


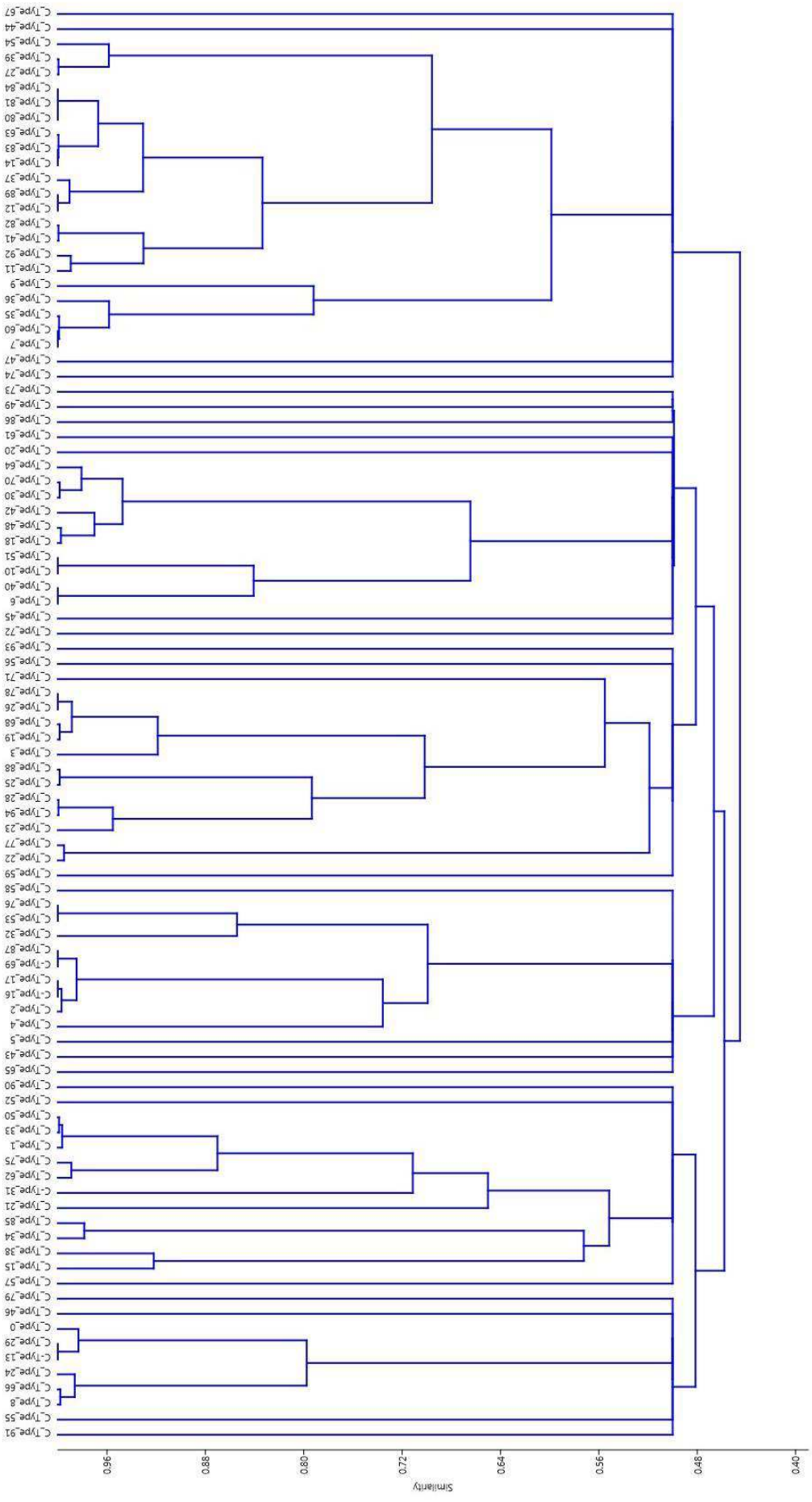
Fig. 3.19: Patterns_Chron=all_UPGMA_RaupCrick.



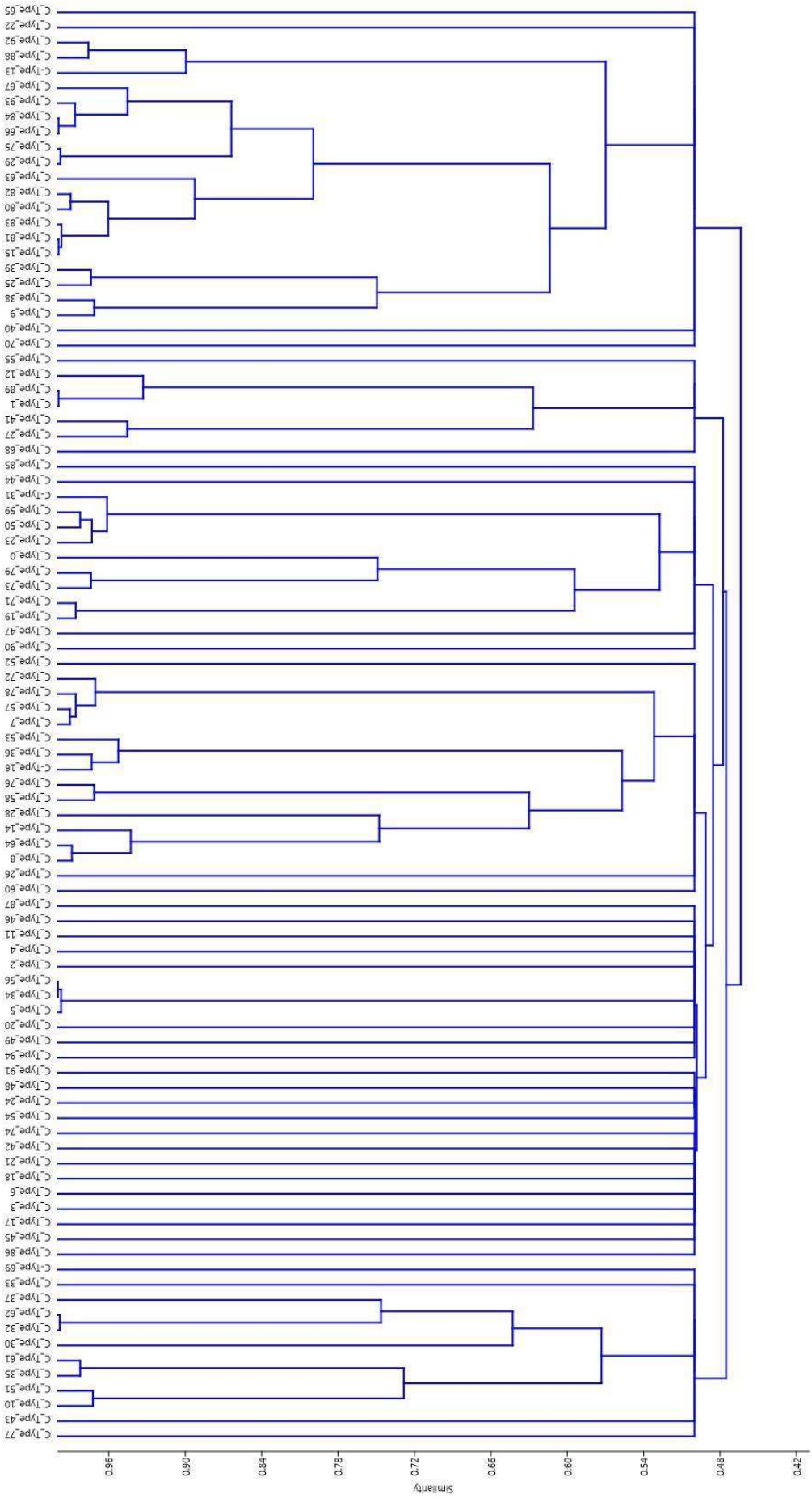
Fig, 3.20: Colour_Chron=all_UPGMA_RaupCrick.



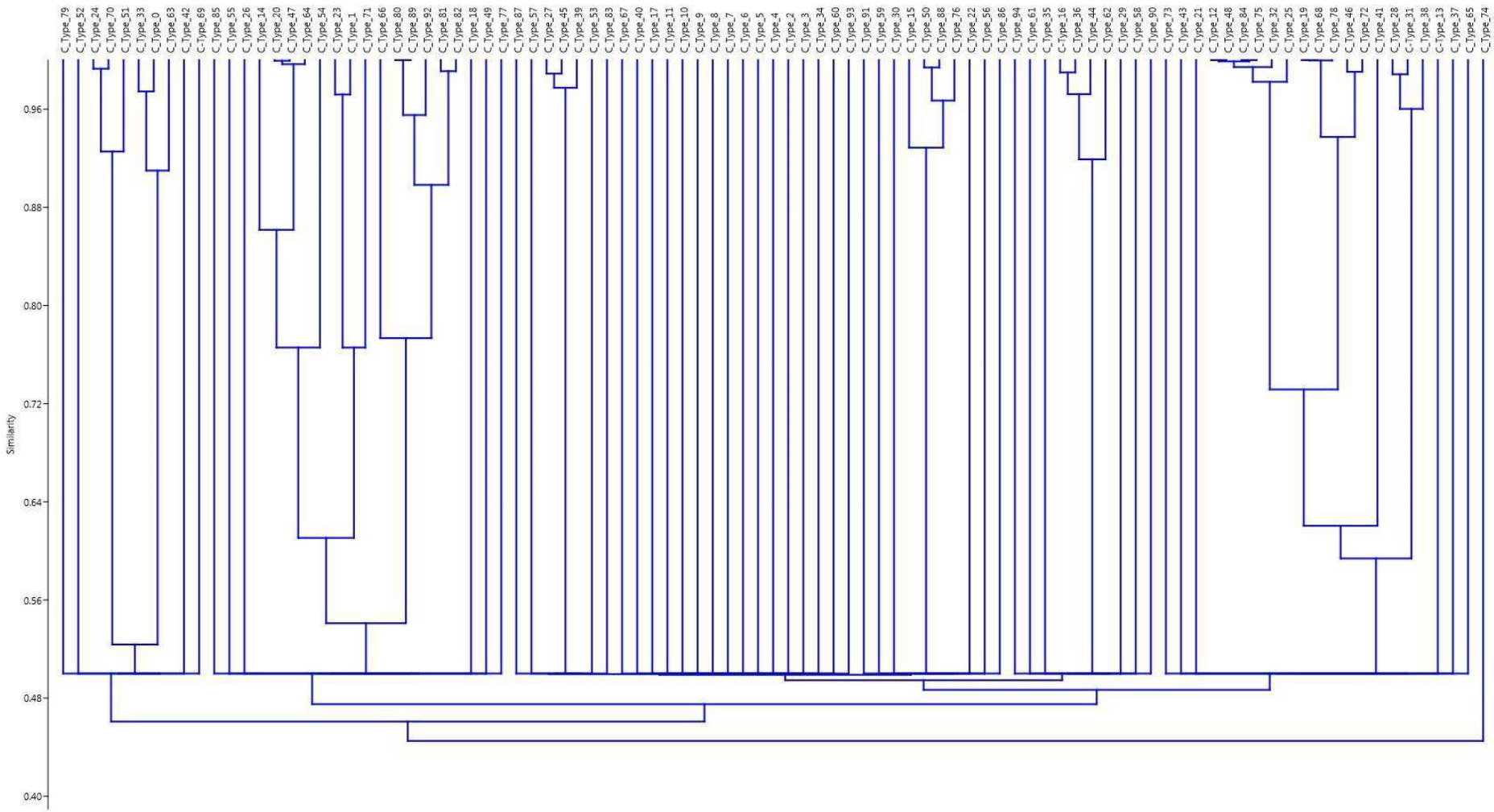
Fig, 3.21: C&A_Chron=6th_UPGMA_RaupCrick.



Fig, 3.22: C&A_Chron=5th_UPGMA_RaupCrick.



Fig, 3.23 C&A_Chron=4th_UPGMA_RaupCrick.



Fig, 3.24 C&A_Chron=3rd_UPGMA_RaupCrick.

4. Data Interpretation (6th – 5th Centuries BC)

4.1 - Introduction

The data analysis presented in chapter 3 identified a number of interesting structures of painted dress representations. It statistically identified structures, the tree branches, of painted dress for the 6th – 5th century BC. These tree branches communicate a trend of high frequency of dress depiction, but weak associative strength between 6th – 5th century BC clothing and adornment types (see Fig. 4.1). The weak associative strength of these tree branches of dress broadens their non-verbal capabilities, and also demonstrates the significant relationship between the frequency of use of particular combinations of dress and their associative strength. These painted dress structures identify how 6th – 5th century BC dress was used as a method of non-verbal communication to convey messages about the living and the dead, about activities of life, and perspectives toward death and burial. This chapter examines how Tree Branch 5, 6, 10, 4, 7, and 8 articulate a hitherto unrealized 6th – 5th century BC propensity for depicting more varied and ambiguous, but also intricate, sartorial utilisations. The majority of painted tombs from the studies sample belong to this period, which number 29 for the 6th century BC and 28 for the 5th century BC. It analyses their differing arrangements of painted dress by investigating the relationship between their associative strength, frequency, and typology.

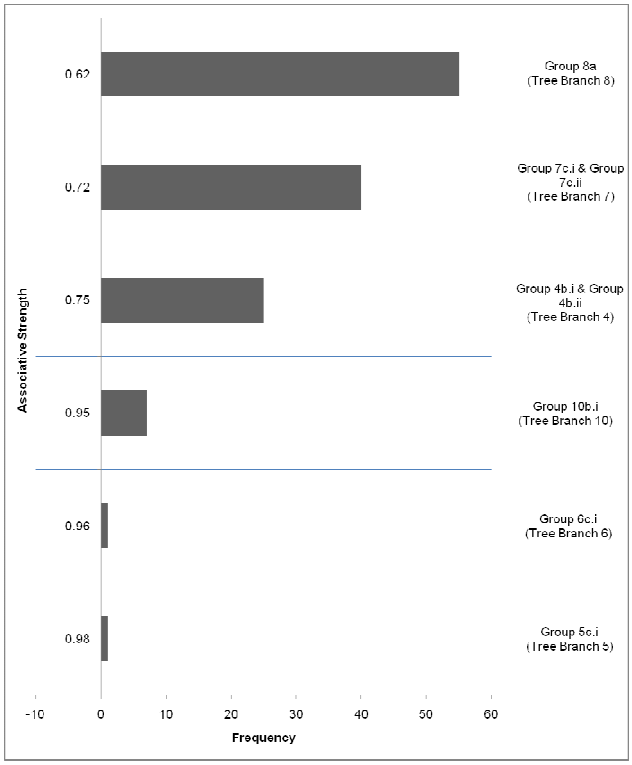


Fig. 4.1: Graph showing the relationship between associative strength and frequency in key 6th – 5th century BC dress groupings. Painted dress is frequent, but the associative strength within the groupings of painted dress is weak. This suggests a broader and less precise use of sartorial communication.

This statistical quantification of painted dress structures surpasses the previously vague statements of dress (see de Grummond, 2014: 214), and it too abandons making simple ethno-

graphic analogy (see Harris, 2003: 43). It further develops Castor's realization that the Etruscans were aware of dress's range of non-verbal communicative capabilities (see Castor, 2010a: 42), and that they took full advantage of such capabilities throughout their painted tombs, at least in the case of the tombs at Tarquinia. Through statistical codification painted 6th – 5th century BC Tarquinian dress is identified as less defined, more malleable, variable, and frequent than later 4th – 3rd/2nd century BC painted dress. Significantly, the 6th – 5th century BC tree branches classify broader patterns of painted dress, most frequent, but some infrequent. They articulate shifting communicative propensities by representing the modifications of relationship between frequency of dress depiction, associative strength between clothing and adornment types, and typological distinctiveness.

This chapter progresses from the dress groupings with the lowest frequency, but strongest associative strength, through to those with a higher frequency, but weaker associative strength. This reflects the significant exception of the infrequent, but strongly associated groupings, and also the prominent role of the frequent, but weakly associated groupings. The infrequent groupings are paradoxically most visible, and are significant because of their narrower precision. Yet, the more frequent, but weakly associated groupings, are also noteworthy as they provide a broader (albeit less immediately visible) mechanism of signification. For example, Group 5c.i narrowly communicates an intimate and personal commemoration, but Group 8a suggests a broader shift in the underlying strategy of non-verbal communication, and a refinement of familial order (see Fig. 4.1). The groupings each manipulate key themes of dress, body, space, place, boundaries, value perspective, and narrative. However, the structure of this chapter, from infrequent and strongly associated groupings, to frequent and weakly associated groupings, demonstrates their differing ranges of manipulation. This manipulation is crucial as the groupings move from dressing Phersu to dressing jugglers, and from dressing castanet dancers to dressing banqueters. The infrequence of strongly associated groupings, and prevalence of weakly associated groupings, posits the broader and less precise arrangement of sartorial depiction for the period. It recognizes the utilization of a Tarquinian painted-dress code, which thrives on loose contrasts and oppositions to orchestrate a patchwork system of non-verbal communication. Painted dress is here an imprecisely wielded tool, which illustrates a 6th – 5th century BC lack of sartorial specificity. The trend of high frequency and low associative strength informing this lack of specificity has several notable exceptions, but these exceptions, such as Group 5c.i, serve to underline a segmented schematic of painted dress that divides communicative preferences.

4.2 – Including the Dead through Strongly Associated (but most Infrequent) Painted Dress Part. 1: Joining the Deceased

Group 5c.i (Tree Branch 5) has the strongest associative strength of 0.98 and a frequency of 1. Its C_Type_86 composition is only depicted in the 510 BC *Tomb of Hunting and Fishing* (see Ta-

ble. 18). Yet, C_Type_86 serves as the most visible co-option of dress as a communicative device. Etruscan men, like their wives, mothers, and daughters, sport a wider range of ornaments than is present in most ancient Mediterranean art, but it is never a regular part of their painted attire (Castor, 2016: 284). Furthermore, C_Type_86 has been identified as a distinct Etruscan form, a culturally specific jewellery type (Castor, 2016: 279). It is an exception to the 'normal use' of generic jewellery types in 6th century BC Tarquinian tomb painting (Castor, 2016: 278), and this reflects its narrower and more precise utilization taken toward death and burial. Etruscan elite's interest in luxury goods belies the infrequent nature of the iconographical evidence for such male adornment (Castor, 2016: 285). Funerary representation suggests that both Etruscan women and men wore more jewellery than their neighbours, and that such adornment was never merely a decorative accessory but instead, its materials, manufacture, and manner of use, communicated the wearers familial, social, and spatial position (Castor, 2016: 276-277). Etruscan artists, and customers, paid close attention to the sartorial details of their accessories, and as such C_Type_86 warrants a more thorough examination. Furthermore, jewellery seen in Etruscan art from this period is neither plentiful, nor does it regularly prioritize such a distinct ram's-head type necklace (Castor, 2016: 279), which is evidence attesting to C_Type_86's special significance.

Depiction of figures wearing a string with a single amulet or group of amulets - such as C_Type_86 - are uncommon in Archaic and Classical art from Italy (Causey, 2012c); and especially so amidst painted Tarquinian tombs. Moreover, the placement of the man wearing C_Type_86 in the tympanum, banqueting with a woman, stresses the supernatural (Torelli, 1999: 155; see Fig. 4.3). The tympanum has been well established as an otherworldly superhuman sacred space deeply rooted in the Etrusco-Italic mentality, which seemingly elevates both man and woman to post-mortem bliss (Torelli, 1999: 155; also Leighton, 2004: 119). The woman's animal-head bracelets are similar to the doubled bracelets later worn by depictions of Vanth (Tuck, 2009: 251), suggesting she is deceased. Yet, C_Type_86, which is identical to the animal head necklaces hanging from painted tree branches amidst a grove in the first chamber of the tomb, accentuates and displaces the man. Thus, C_Type_86 has here been deliberately utilized as an artistic device, which was designed to link the man to the leafy and lively grove painted outside of the tympanum, and intended to portray the outside of the tomb (see Holloway, 1965). The replication of C_Type_86 amidst the lively actions of hunters, fishermen, and revellers, surrounded by nature, demonstrably reflects that the design of the *Tomb of Hunting and Fishing's* paintings was intended to deliberately communicate a sartorial connection between the worldly activities, and the man depicted in the supernatural tympanum (see Torelli, 1999: 155).

The Dionysian elements identified within the paintings of the *Tomb of Hunting and Fishing*, particularly within the C_Type_86 containing grove, further stress the link between lively activity,

Fig. 4.2: Italic Ram's-Head pendants 525 – 400 BC almost identical to the pendants worn by the male banqueter in the *Tomb of Hunting and Fishing* (Causey, 2011: 72 & 87). Brown (1960: 106) was the first to make the connection between the painted images and excavated gold animal head pendants.

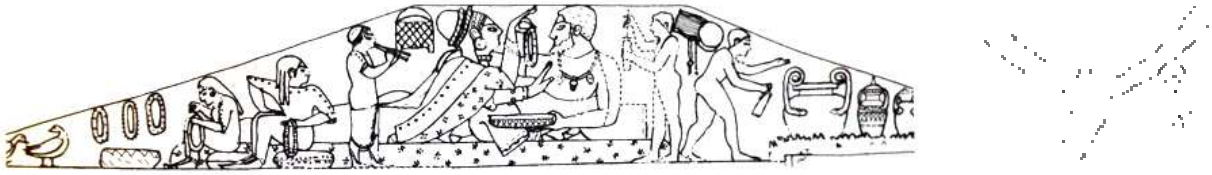


Fig. 4.3: The banquet in the tympanum of the main chamber in the *Tomb of Hunting and Fishing* (Steingraber, 2006: 86-87).

C_Type_86, and the man depicted in the tympanum (Steingraber, 2006: 95; Haynes, 2000: 229 also interprets the tomb as Dionysian). The C_Type_3 wearing, almost naked, and grotesquely inflated figures depicted in the antechamber of the tomb perform a lively Dionysian dance, to the accompaniment of a flautist, in a grove richly decorated with pyxides, mirrors, wreaths, rib-

bons, amphora, and C_Type_86 necklaces (Steingraber, 2006: 95; Holloway, 1965; see Fig. 4.4). This is a grove where nature and life prevail (Haynes, 2000: 229). The reclining satyrs too, depicted with their drinking horns on the gable of the entry wall, act as additional Dionysian markers of life and revelry (Steingraber, 2006: 96). Furthermore, the depicted return from the hunt, with hunters, dogs, servants, and abundant quarry, in an almost tropical landscape with lush vegetation, and the adjoining images of seascapes, waves, boats (with apotropaic eyes), fishermen, birds, and dolphins in the main chamber, not only stress the tomb owners *virtus*, but also their enlivened vitality (see Fig. 4.6). Moreover, the lush vegetation surrounding the two figures on horseback, also seen in the 7th century BC *Campana Tomb* at Veii, strongly suggest that these images served an apotropaic function (Holloway, 2006: 374). Therefore, C_Type_86, through its simultaneous adornment of the banqueting man and of the trees in the lively grove, and by the clearly observable evidence of its myriad painted associations, deliberately connects both the man in the tympanum, and the displayed natural life and activities.

C_Type_86 is also significant because it has the face and form of a ram, which continues the well identified trend of utilizing artistic representations of fierce and apotropaic animals in funerary contexts to symbolically defeat influences malevolent to the living or the dead (Holloway, 2006: 374). This trend is evident from tombs such as the *Tomb of the Painted Lions* and the *Tomb of Painted Animals* at Cerveteri, and from the *Tomb of the Lionesses*, *Tomb of the Leopards*, *Tomb of the Bulls*, and *Tomb of the Panther* at Tarquinia (see Steingraber, 1986). Two apotropaic felines are also painted opposite the banqueting couple, over the doorway of the second chamber leading to the antechamber, in the *Tomb of Hunting and Fishing* (Holloway, 2006: 375). More pertinently these fierce apotropaic animals are consistently found in the gable/tympanum triangles of each tomb (Holloway, 2006: 374), which aptly reflects the positioning of C_Type_86, and is evidence suggestive of C_Type_86's similar apotropaic form and function. Moreover, the man wearing C_Type_86 makes overt advances toward his female dining companion, as his leg is curled suggestively around her waist, and his hand is resting on her shoulder (Holloway, 2006: 375). This depiction of sexual vigour, such as that also prominently evidenced by the *Tomb of the Bulls* (see Holloway, 1986), was a potent artistic device also used for apotropaic purposes (Holloway, 2006: 375). Yet, it is possible through a more thorough examination of C_Type_86 to tentatively advance interpretation of the banqueting couple, so as to go beyond merely acknowledging their apotropaic overtones (Holloway, 2006: 375).

The ram's-head pendant necklace (C_Type_86) in the *Tomb of Hunting and Fishing* was deliberately rendered in outline against the brown flesh of the man, suggesting it was intended to represent amber (Castor, 2016: 279). Combined with the trees in the lively grove having been identified as laurels, marking a sacred space of Apollo (Simon, 1998: 119), this implies that the C_Type_86 animal head necklaces, hanging from the laurel trees, can be understood more firmly

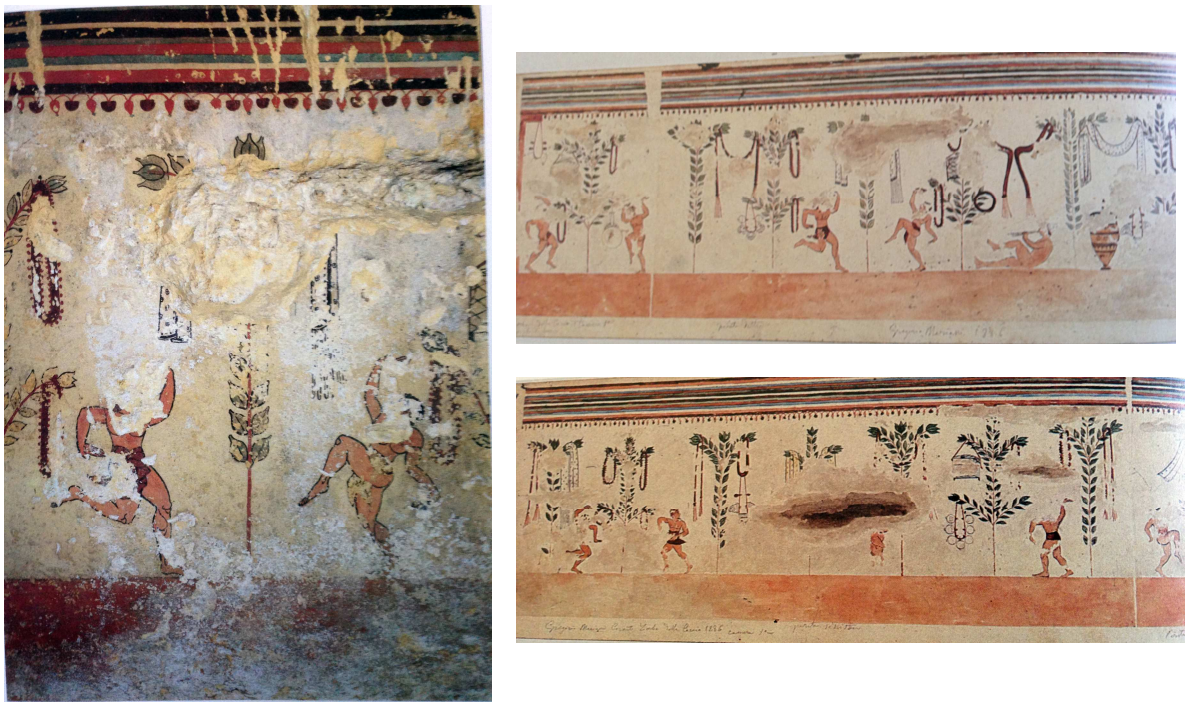


Fig. 4.4: The sacred grove decorating the walls of the first chamber in the *Tomb of Hunting and Fishing* (Steingraber, 2006: 96).

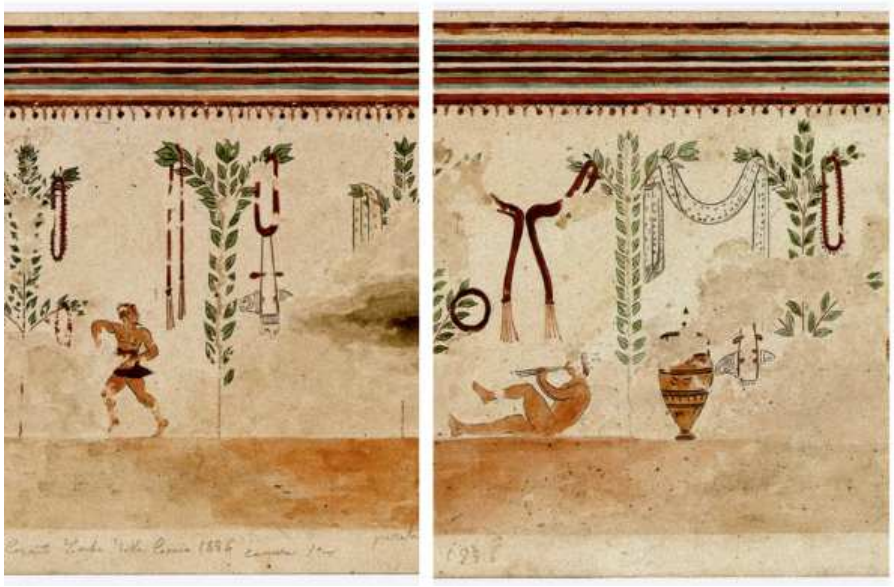


Fig. 4.5a: In the first room of the tomb, simple carriers with rams' and lions head pendants (amber), similar to those worn by the banqueting man, hang from the branches of laurel trees amidst a scared grove populated by revelers, dancers, musicians, etc. (Steingraber, 2006: 96).

Fig. 4.5b: A lion head pendant (Causey, 2011: 88).

Fig. 4.6: The return from the hunt depicted in the first chamber of the *Tomb of Hunting and Fishing* (Steingraber, 1986: 194).

Fig. 4.7: The 'eschatological dive' (Steingraber, 2006: 105).

as painted evidence of a connection between C_Type_86, amber, Apollo, and life in the tomb's paintings (Causey, 2012a; see Fig. 4.5a & 4.5b). C_Type_86's depiction also emphasises the necklaces tied knots, which secures the pendants, but also both the knots and the action of tying the knots are known in other contemporary contexts to be critical to apotropaic usage and the hindrance of negative actions (Causey, 2012b). The knots, bands, threads, and strings might thus have transformed the individual pendants into a necklace that caught demons and their corresponding diseases and misfortunes (Causey, 2012b). The ability of amber has also been identified in other contemporary contexts to attract and fix the sun's influence through its brilliance and colour, as well as to harness the powers of a deity and astrological force, which also might have amplified the connections to life evidenced by C_Type_86's adornment of the sacred grove's laurel trees (see Reiner, 1987: 27). The young boy's eschatological dive from this world into the next, depicted below the banqueting couple on an adjacent wall, also mimics the psychopomp like depiction of the man by his wearing of and connections through C_Type_86 (see Holloway, 2006: 375; also Fig. 4.7). Furthermore, figuring the amber, providing it with the face of a ram, not only links it to the tradition of representing apotropaic animals, but the figured object also becomes a metonym for a past event or desired outcome, by combining layered associations of meaning through both its material, its imagery, and its attachment to an individual (Causey, 2011: 73).

The deliberately painted C_Type_86 connection between the man in the tympanum and the activities of life in the grove in the first chamber of the *Tomb of Hunting and Fishing*, and C_Type_86's obvious relation to Etruscan funerary painting's utilization of heraldic and apotropaic animals (see Holloway, 2006: 374), is evidence supporting a more nuanced utilization of apotropaic imagery. This assertion is tentatively supported by the perceived qualities of amber in the ancient world (see Reiner, 1987: 27), and the tomb paintings identified themes of Dionysus and Apollo (see Haynes, 2000: 229; and Simon, 1998: 119). Significantly, C_Type_86 derives powerful new meaning because it is attached to the banqueting man (Causey, 2011: 73), which implies he is apotropaic by his wearing and appropriation of a fierce heraldic animal (Holloway, 2006: 374). The man is visibly connected to the liminal dimension of the dead implied by the tympanum (see Torelli, 1999: 155), but also visibly connected to the world of the living implied by the lively (perhaps sacred?) grove – thus he is evidently safe to inhabit both painted spaces without ominous outcomes (see Sannibale, 2012: 101). Therefore, he has been deliberately imbued with the apotropaic power of the ram, which was previously an animal reserved for decorating and warding gable/tympanum triangles, and not for adorning individuals. Thus, it can be reasonably assumed that C_Type_86 permits the man's spatial proximity to his dead female banqueting companion, and his traversal between life and death, through its self-evident apotropaic qualities. C_Type_86 has been so particularly situated and positioned amidst

the *Tomb of Hunting and Fishing's* paintings so as to indicate a necklace offering such traversal and protection (see Causey, 2012a; see Fig. 4.2).

C_Type_86's simultaneous adornment of the banqueting man and laurel-trees, and its ram-head design, are indicative of a signifier bridging boundaries, which are perhaps those of the past, the present, and a desired future. The past would be the man's memory of dining with his wife, the present would be a funerary banquet in her honour, enjoyed by both man and wife, and the desired future would be for the couple to dine together in post-mortem bliss. The richly bejewelled woman evidently continues to know luxury and ease, and the presence of her living husband, permitted by his rams-head necklace, indicates the potential ongoing strength and longevity of their family line (Bonfante, 2013: 428). That C_Type_86 displaces the otherwise living man into the nether-bound liminal banquet to dine with his dead wife, by retaining and reinforcing his connection to life, is too supported tentatively by both the Dionysian and Apollonian interpretations of the *Tomb of Hunting and Fishing* (see Haynes, 2000; and Simon, 1998). The notions of ritual madness, fertility, revelry, sun, light, and healing, invoked by these themes, resonate with the tomb's painted life, nature, and vitality. The harmonious fusion of figures, ornaments, decoration, and landscape, also suggest a uniquely Etruscan style (Steingraber, 1986: 293). While it is possible to repeatedly confirm Greek influences, these influences merely supplement the fundamentally Etruscan styles and beliefs without imparting a complete transformation (Krauskopf, 2006: 77-78). Therefore, it is prudent to question the conscious Etruscan awareness and primacy of the previously discussed symbolism underlying C_Type_86 given their primarily Greek genesis (see Causey, 2011: 73).

Etruscan reception and understanding of amber, rams-heads, sacred groves, Dionysus, or Apollo, is tentative, and the Dionysian and Apollonian themes work differently in their capacity as a vehicle driven by C_Type_86, which offers protection, and perhaps suggests a new stage in life brought about through death (see Castor, 2016: 290). Yet, the distinct C_Type_86 serves as the key pivot around which the message and meaning of the iconographic presentation in the *Tomb of Hunting and Fishing* turns, because it provides an undeniable connection between the tomb's disparate paintings. Arguing that C_Type_86 is not the pivot, but instead only a reflection of the Dionysian and Apollonian intent is to assign passivity to this explicitly Etruscan dress. Yes, the supposedly Greek mythological themes and concepts were deployed in the tombs presentation, but they are actively manipulated by way of C_Type_86, the distinct local adornment. C_Type_86 signifies the banqueting man's ownership of the painted scenes throughout the tomb, as it is his unusual personal adornment strewn amongst the depicted activities.

The life-marking connections of C_Type_86 further develop the argument of the paintings in the *Tomb of Hunting and Fishing* representing an illusionistic program of decoration (see Holloway, 1965). This program mimics architecture in an illusionary scheme, which sought to re-

create in the tomb the view from the interior of the pavilion erected for the funeral banquet, so that the shade of the deceased might too witness and participate in the honorific ceremonies (Holloway, 1965: 346). The man, although still amongst the living, is depicted in his funerary painting without tempting fate, and attends a banquet with the deceased, due to his depicted connection to life through his wearing C_Type_86, and thus directly connecting with the view of life from the interior of their 'pavilion'. The woman, now amongst the dead, is offered not just observation and isolation, but also interactive participation. The evidence underpinning this interpretation is the arrangement and depiction of C_Type_86 within the *Tomb of Hunting and Fishing's* paintings. C_Type_86's depictions are significant, regardless of its tentative symbolism, given its deliberately contrasted positioning in the deceased's tympanum, and the lively grove. C_Type_86's painted utilization metaphorically echoes that of the boy's eschatological dive (Steingraber, 1986: 105), which sees the boy plunging toward the sea (the deceased woman), and his companion remaining by the rock (the living man), that served as the diver's point of departure (the tomb), unable to follow his friend, but able to participate in his departure (see Fig. 4.7).

C_Type_86's notability arises not from the 'imaginative logic of a structuralist analysis (see Spivey, 1991: 146), but from its contrast with the 6th – 5th century BC trend of weak associative strength and high frequency amidst painted dress. The stylistic message (see Wobst, 1977) of C_Type_86 emanates from its infrequent distinctiveness contrasting with its surrounding frequent and mundane types of painted dress. There was an evident need to accentuate the living man so as to convey not just his painted message of tangible loss, but also his message of devotion and honour, the hope of eventual reunion, and his own eventual apotheosis to ancestor (his death). This painted tomb is more than an allusion to an aristocratic sea-girt estate (see Steingraber, 1986: 193). C_Type_86 goes beyond reflecting mere wealth and status, and towards ensuring a carefully crafted message communicating a narrower, more precise, painted perspective toward death and burial. For the man to not make such a connection to life would be to lose status, convey weakness, and diminish the implied longevity and prosperity of his family. He would be depicted as dead. To not join his wife in the tympanum would be too imprecise, and leave her a lonely observer at not just her honorary banquet, but also throughout her painted eternity. Group 6c.ii deploys a comparative painted sartorial technique to also tailor a precise idiosyncratic non-verbal message, which too utilizes infrequent, distinctive, and strongly associated clothing and adornment types contrary to 6th – 5th century BC norms.

4.3 - Presenting the Living through Strongly Associated (but still Infrequent) Painted Dress Part. 1: Challenge and Competition

Group 6c.ii (Tree Branch 6) has a strong associative strength of 0.96 and a frequency of 1. It too contrasts the 6th – 5th century BC trend of weak associative strength and high frequency to communicate a narrower, most precise, sartorial message. C_Type_90's and C_Type_94's asso-

ciation has been statistically determined to only adorn a girl performing a balancing act on the rear wall of the 510 BC *Tomb of the Jugglers* (see Fig. 4.8 – 4.9 & Table. 21). As well as wearing the metal disc belt around her waist, and the metal disc cross-straps passing over both of her shoulders, the girl also wears a long transparent chiton with short sleeves, and over this a sleeveless red jerkin, along with a tall red cap (tutulus or headscarf?), and a tellingly over-sized disc shaped earring (see Fig. 4.10). Furthermore, the girl is barefoot. The hem of her chiton flies out in such a way that shows she is whirling around while balancing an incense burner on her head, whose top bowl with the burning incense protrudes into the banded frieze above (Haynes, 2000: 231). The musical accompaniment is not surprising, neither is the peculiarity of the performance (a kind of *kottabos game*?), nor is the informal circus-like atmosphere (see Vellucci, 1985: 29), but the attire of the girl is surprising given her context of performance. Although the types of Group 6c.ii are likely composed of the same pale disc shaped objects held by the young acrobat wearing a short tunic standing in front of the balancing girl, the composition they form in no way facilitates the girls activity of balancing and juggling. The attire of the girl surprisingly hinders, rather than facilitates, her activity, an activity that is embodied by both C_Type_90 and C_Type_94, which are key and visibly distinct recreational components of her dress (see Roach & Eicher, 1979: 15).

Fig. 4.8: The *Tomb of the Jugglers* rear wall (Steingraber, 2006: 95).

Fig. 4.10: Girl Balancer (Steingraber, 2006: 95).

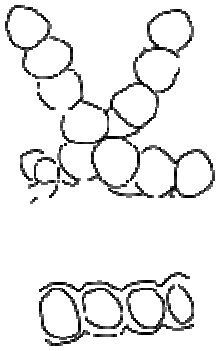


Fig. 4.9: C_Type_90 and C_Type_94.

It may seem obvious to state that the girl performing the balancing act has a body, but most scholarship on dress, and on the painted Tarquinian tombs in particular, fails to take into account the 'dynamic relationship between dress and the body' (Lee, 2015: 31). Too frequently theories of the body overlook dress, theories of dress leave out the body, and examinations of painted tombs neglect both the body and dress (Entwistle, 2000: 325). As a situated bodily practice, embedded within the social world and fundamental to micro social order, dress actively engages in the production of society through the practices it facilitates or prevents (Entwistle, 2000: 325). In a work of art especially, more of the whole picture of clothed humanity is re-

vealed; we can see details of the clothes themselves, how they *work* on the body, and what they signify with regard not just to sex, age, and class, or even status and cultural aspirations, but also to their bodily affect (Ribeiro, 1998: 320). This bodily affect is important as it serves as a barometer for the dressed individual's behaviour and activity (as per Veblen, 2007). Thus, the attire of the balancing or juggling girl in the *Tomb of the Jugglers* is surprisingly contradictory through the restrictions it imposes upon her chosen activity. The most glaringly obvious of these sartorial contradictions is the red cap (tutulus or headscarf?). This tall red cap is less than ideal attire when attempting to balance a *thymiaterion* on your head; such a hat would seem to entirely prohibit the subtle nuances required of this activity. Furthermore, the weight and motion of the earrings (presumably a pair?) would have to be carefully balanced, as well as adjusted against the hat, and the sleeves of the chiton, although short, when combined with the jerkin limit the potential range of upper body movement. So too do C_Type_90 and C_Type_94 also contribute unnecessary and restrictive bodily clutter to what is supposed to be a delicate and dexterous performance. The girl is also outdoors (laurel trees?) but performing barefoot, which is a challenging proposition when balancing, juggling, and whirling.

Physical activity played an important role in the performance of Etruscan funerary celebration (Vellucci, 1985: 23). Yet, it would seem that the balancing/juggling girl's painted attire is contrary to her activity. The attire of the girl suggests that her depiction on the tomb wall is not a careful documentation of a given performance, but rather a dramatization. The attire adorning the girl is not suitable or conducive to the requirements of her performance, and is far from 'displaying an exact section of real life' (Gori, 1988: 368). Consequently, a particular Etruscan peculiarity, akin to the strange stances of Etruscan discus throwers, the unique holds of Etruscan wresters, or the partially clothed Etruscan athletes, can be detected through the girl's sartorial depiction (see Vellucci, 1985: 28). The restrictive bodily properties of the painted attire transforms the juggling and balancing act from entertainment into a competitive, almost sport-like, activity. This conforms to other peculiarities of illustration when depicting competitive contests, such as wrestlers being tossed head over heels above their adversaries, or the blood flowing from the face of a defeated boxer subjected to realistically portrayed violent blows (Jannot, 2005: 49). Artistic license emphasizes the competitiveness, challenge, and importance of the girl's physical activity (Rebay-Salisbury, 2012: 189). Dress has been artistically re-tailored to denote not only the distinction, but also the skill, struggle, sacrifice, and endurance of the performer; as well as extending the honour of the game beyond its amusing, noisy, and lively qualities (Gori, 1988: 262). This firmly shifts the girl's elderly observer from spectator to a judge of her physicality, skilful embodiment, competition, and challenge (see Steingraber, 1986: 311).

C_Type_90 and C_Type_94 indicate the painted shift from 'entertainment-game' (see Gori, 1988: 360) to competitive sport-like activity. They do this not only by their mimicry of the metal

discs, but by way of bedazzlement (see Simon, 1998: 125). If supposed that the four slim laurel trees dividing the juggling/balancing scene on the rear wall of the *Tomb of the Jugglers* (see Haynes, 2000: 230) represent a link to the sun by way of Apollo (see Simon, 1998), or that they merely suggest an open outdoor context, then the sun will inevitably interact with the clothing and adornment types of Group 6c.ii to the detriment of the young boy juggler. C_Type_90 and C_Type_94 are made of metal (Haynes, 2000: 231) and reflect the rays of the sun. Therefore, regardless of whether the boy is attempting to throw rings on to the top of a balanced candelabrum (Gori, 1988: 365), or attempting to extinguish the flame at the top of a balanced incense burner with carefully aimed discs (Haynes, 2000: 231), he will find it most difficult to succeed due to the bedazzling glare projected from his moving target.

Furthermore, the vitality of the otherwise almost *athlete* boy and girl is also demonstrated by the sheer size of the balanced incense burner, a size that necessitates the girl hold it with both hands, and a size that vertically extends beyond the top border of the fresco (Gori, 1988: 366). Not only does the size make it heavy and harder to balance while remaining mobile, but it also places the juggling boy's target out of his line of sight (and almost out of that of the viewers)[1]. The elevated target atop a whirling, dancing, and bedazzling girl is a challenging, skilful, and competitive objective. It would be quite the feat of accuracy to hit such a target. The girl too, standing barefoot on a spacious board (Gori, 1988: 366) or rough terrain and spatially separated from the other individuals in the scene, displays impressive feats of dexterity. This aligns with the Etruscan honouring of the dead through the vigour of athletes, so as to sate a concept of death in the habit of giving sacred meanings of expiation and glorification of the gods to their sporting and musical festivals (Gori, 1988: 360).

The balancing girl's infrequent and unusual attire, depicted on the rear-wall of the *Tomb of the Jugglers*, distorts and enhances reality. This juggling/balancing scene is recreated, albeit in a rather lifeless fresco and with slight variations in the positions of the performers, with more of an emphasis upon *reality*, in the later 480 BC *Tomb of the Monkey* at Chiusi (see Haynes, 2000: 231; see Fig. 4.11 & 4.12). The female dancer in the aforementioned tomb stands on a low podium (perhaps a basket lid?) wearing a red skirt, yellow sleeveless bodice, basic shoes (lid straps?), short hair, and metal disc-cross straps (C_Type_94), while balancing a candelabrum on her head. Gone are the belt of metal discs (C_Type_90), the over-sized earrings, the bare feet, the transparent short-sleeved lengthy chiton, the long hair, and the red cap (tutulus or headscarf?). Gone is the overly elaborate and restrictive painted dress. The balanced candelabrum is also here much smaller and more manageable, similarly there is no allusion to the distracting sun, and there is no young 'juggling' boy attempting to aim discs or rings. The throwing ring game of accuracy de-

[1] The outline of the top portion of the incense burner is almost imperceptible due to the dark red of the horizontal band frieze (see Fig. 4.13).

picted in the *Tomb of the Jugglers* is a novelty, a unique example of such a competition in the Etruscan world (Gori, 1988: 366). The only visage of difficulty and competitiveness in the *Tomb of the Monkey* scene can be found in the twisted and stiff posture of the female dancer, which suggests that her dance is made slightly more difficult by the limited space, her long skirt, and the object that she must balance on her head (Gori, 1988: 365). The lack of challenge, vigour, and competitiveness displayed here is emphasized by the unusually strange dress of the accompanying musician, who wears a hat with a wide brim, with the front turned back, probably to make people laugh (Gori, 1988: 366). The contrast between the *Tomb of the Monkey's* lively and humorous paintings that reproduce numerous variations of funeral games and entertainment, and the *Tomb of the Jugglers* singularly competitive and almost circus like spectacle, is stark. This clash of two otherwise similar scenes (even tombs!) accentuates the *Tomb of the Jugglers* modification of reality through its narrower specificity of painted dress.

Fig. 4.11: Wider context of the Juggling scene from the *Tomb of the Monkey*, Chiusi (Steingraber, 2006: 121).

Fig. 4.12: Juggling scene from the *Tomb of the Monkey*, Chiusi (Steingraber, 1986: 274-275).

The distinction between painted dress and performance within the *Tomb of the Jugglers* and the *Tomb of the Monkey* denotes the disparity in the level of their socio-economic value. For example, the balancing girl's red cap in the *Tomb of the Jugglers* could be a clasped hat akin to a *tutulus*, which is intentionally made from a thickened fabric so as to help support her large unwieldy incense burner. This hat would also be supported by the girl's long hair tied into a bun so as to ensure its interior is not hollow. This would provide a sturdy and large surface area on which to balance the expansive base of the incense burner. The hat would most likely be uncomfortable, heavy, and generally impractical, but appropriate for a sport-like or competitive activity requiring skill. However, it could also be that the balancing girl is instead wearing a headscarf to support the incense burner. The manipulation and support of the girl's hair with straps, pins, and a headscarf makes more sense from the perspective of effectively accommodating the increased challenge of her activity. A headscarf would provide the necessary surface area but also be relatively comfortable and easier to dynamically manipulate throughout the activity. The girl in the *Tomb of the Monkey*, in contrast, balances a small candelabrum that perfectly fits the contours of her head, which allows her hands to be placed on her hips rather than on supporting the candela-

brum. This suggests that such a candelabrum is easily portable and deliberately designed for the performance. There is no need for a sartorial strategy to ensure the success of the performance due to its reduced complexity. There is a noticeable specificity here between professional practice and entertainment, which acknowledges the different types of dress amidst the different levels of ability and proficiency. This is indicative of wealth and value, and whether an individual could afford (or if they wanted?) the most highly skilled and prestigious of performers, or only the amateurs, for their funerary celebration.

The exhibition demonstrated on the rear wall in the *Tomb of the Jugglers* is drawn to be more significant and specific than its counterpart depicted in the *Tomb of the Monkey*. The balancing girl and young boy juggler depicted in the *Tomb of the Jugglers* are two competitors, both requiring physical skill, following formal rules (ritual attire?), and competing within a formal organizational framework (funerary space?), so hence their physical activity can be defined as more 'sport-like' (LeUnes, 2008: 5). The art through its imposition of sartorial impracticalities, such as those of C_Type_90 and C_Type_94, as well as the other pieces of attire, and the *other* content types, has been consciously illustrated to convey this exaggerated message of 'competitive discipline' (Rebay-Salisbury, 2012: 190). This 'competitive discipline' is contrary to the traditional classification of the scene as 'entertainment-game' (see Gori, 1988: 366), and thus not usually a role comparable with that reserved for the sporting events comprising the competitions of the classical tradition[2] (Gori, 1988: 367). Therefore, the juggler balancing disc/ring-throwing scene, in the *Tomb of the Jugglers* at least, is not a 'side show', but a primary component of its decorative and funerary program (Gori, 1988: 368). It is unlike the *Tomb of the Monkey*, with its chariot races, wrestlers, javelin throwers, boxers, weapon dancers, and horse riders, that the *Tomb of the Jugglers* derives its competitive sporting homage to the dead outside of what are considered the traditional Hellenic models (Gori, 1988: 368). A consideration of dressed bodily affect is necessary to realize this significant deviation (as per Veblen, 2007). A realization that the balancing girl's artistically exaggerated attire places an emphasis on competition through having to overcome such restrictive properties of dress, or from having to adapt her dress to address the challenge. It is a realization that such sport-like competition, traditionally read as 'entertainment', can only be accurately identified via recognition of the paintings unusually narrower sartorial focus.

The artistic specificity taken toward depicting the attire of the juggling girl is used to ensure the effective communication of competition, skill, challenge, and value. This artistic portrayal of attire ensures parity with the more typically illustrious and typically Greek sporting events. This parity permits the tomb's owners to selectively depict the competitive athletics that 'suited them best' (Gori, 1988: 367). Furthermore, the artistic exaggerations maintain the excitement and

[2] Namely pentathlon, foot races, wrestling, boxing, trial of strength, horse and chariot racing (Gori, 1988: 371).

drama of a sports event while also injecting creativity and circus like spectacle. The competition communicated by C_Type_90 and C_Type_94, alongside the twirling girl, the young juggler, and the laurel trees (sun), are reflective of this sport-like equality through mandating complexity, difficulty, and skill (see Leighton, 2004: 117). These types represent the inherent artistic necessities of tomb painting, which like dress is to communicate. However, this is a communication in the *Tomb of the Jugglers* that differentiates itself through exaggerated forms of dress, so as to more accurately depict the specific intent of the reality behind the exaggeration[3]. C_Type_90 and C_Type_94 act as signifiers of typographical emphasis prompting the viewer toward the significance of competitive funerary practice. A competition only realized by a contextual positioning of both C_Type_90 and C_Type_94 into a situated bodily composition. This is an infrequent and strongly associated composition that conveys the communicative intent of the tomb paintings, a communication presenting the competitive idiosyncrasy of the *Tomb of the Jugglers*. This idiosyncrasy is continued by Group 10b.i as implied by its 0.95 associative strength, but it is no longer confined to infrequent one-off depiction. Group 10b.i's frequency of 7 departs from the prior groupings frequency of 1, which suggests its eccentricity holds either stronger appeal or possesses specific utilization.

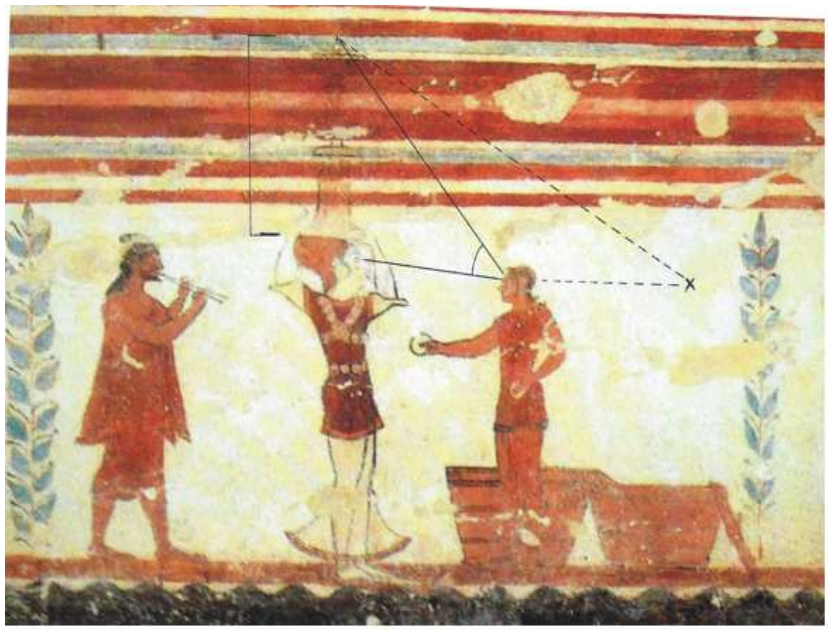


Fig. 4.13: The painting is intentionally drawn to make the physical activity look more challenging and competitive (rather than just entertaining). For example the sight line of the young-boy juggler is too steep for him to clearly and comfortably see (let alone hit) his target - especially if he is performing what looks to be an under-arm throw (Steingraber, 2006: 95).

[3] Raises the question of just how accurately jewellery, clothing, and adornment were portrayed in the painted representations (see Castor, 2016: 278; and also Bonfante, 2003: 2)? Although, this line of reasoning is irrelevant as such depictions of dress are but the tools of communication. They have been consciously depicted, associated and contextualized, and that is what is significant. The real or ideal debate is redundant when recognizing the paintings as artefacts in and of themselves, and not just as flawed reproductions of reality.

4.4 - Including the Dead through Strongly Associated (and comparatively more Frequent) Painted Dress Part. 2: The Phersu Solution

Group 10b.i has a strong 0.95 associative strength and a frequency of 7. This makes it the most significant of the several exceptions to the 6th – 5th century BC trend of high frequency, but weak associative strength amidst painted dress. Group 10b.i's distinctive composition consistently identifies Phersu. The 520 BC *Tomb of the Augurs* portrays ritual scenes and athletic episodes, and depicts Phersu thrice. The right-most wall (see Fig. 4.14) depicts Phersu holding a dog on a leash that bites the leg of a man whose head is covered and holds a club. The opposite wall shows Phersu dancing alone, or fleeing (Steingraber, 1986: 283; see Fig. 4.15), between plants and birds, wearing his mask and hat, but noticeably fewer clothes. The entrance wall displays Phersu partaking in a contest of strangulation (see Fig. 4.17). The 510 BC *Tomb of the Olympic Games* and 510 BC *Tomb 1999* have similar bloodthirsty Phersu scenes, with a single Phersu each, but the rest of these tombs are decorated with not just athletes and ritual, but also revellers and banqueting (see Fig. 4.16). The repertory of the 500 BC *Tomb of Pulcinella* also combines athletic and musical events with a single scene of Phersu dancing between two small trees behind a rider; so too does the much later 400 BC *Tomb of the Cock*, which depicts Phersu dancing to the sound of a flute next to a female figure[4] (see Fig. 4.18). Although, the bloodthirsty Phersu game is noticeably absent from both the *Tomb of the Pulcinella* and the later *Tomb of the Cock*, which somewhat disrupts the non-sartorial schematic of iconographical consistency.

Fig. 4.14: The uniform and expected attire of Phersu. C_Type_51 = conical helment, C_Type_77 = the mask, C_Type_22 = the chiton and loincloth, and C_Type_44 = the ankle wraps (Avramidou, 2009: 74).

The consistent repetition of the distinctive pointed hat, tight-chequered chiton, red loincloth, mask with a long black beard, and ankle wraps, emphasizes the strong deliberateness of this

[4] Comparable dancing and mime scenes are also found in the *Tombe dei Giocolieri* and Tomba de *Scimma* at Chiusi, as well as on black-figure Etruscan vase painting, and elsewhere (Steingraber, 1986: 283 & 337). The *Augurs*, *Pulcinella*, and *Cock* tombs are also grouped together in the northern sector of the Monterozzi necropolis (Avramidou, 2009: 79). The *Olympiads* and *1999* are not with this group.

composition (see Fig. 4.14). Furthermore, their almost exclusive depiction in 6th – 5th century BC Tarquinian tomb paintings, alongside a strange mixture of sports and knock-about spectacles, nearly all of which are supposedly dangerous, bloody, and life-threatening (Jannot, 2005: 50), stresses a uniquely precise signifier (see Lommel, 1972: 7). This composition is an aberration amidst the Tarquinian painted clothing and adornment typology. Particularly, the constant wearing of a mask with the same features is strange, and represents impersonation (Avramidou, 2009: 74). The mask represents a specific perspective (Lommel, 1972: 7), which facilitates Phersu's reckless behaviour and abandon amongst depictions of death and burial, and enhances the visibility of Group 10b.i alongside its accompanying (and equally noticeable) bloodthirsty Phersu game. The attire is remarkably consistent, and it possesses a more coherent uniformity than that displayed by the dress of Vanth, Charun, castanet dancers, or other such characters and actors (see Fig. 4.14). This frequent consistency establishes a precise semiotic repetition, and sharply contrasts the otherwise lackadaisical and broadly imprecise deployment of 6th – 5th century BC painted dress (see McCracken, 1987: 120). Yet, prior study of Phersu disregards his non-verbal sartorial communication in favour of disjointed non-Etruscan models of interpretation (for example Bieber, 1961a: 147 calling the character a 'masked harlequin').

Fig. 4.15: The half-naked dancing or fleeing Phersu depicted in the *Tomb of the Augurs* (Steingraber, 2006: 73).

Fig. 4.18: A dancing Phersu in the *Tomb of the Cock* (Steingraber, 2006: 131).

Fig. 4.16: The 'blood thirsty' Phersu game as depicted in the *Tomb of the Augurs* (Steingraber, 2006: 93).

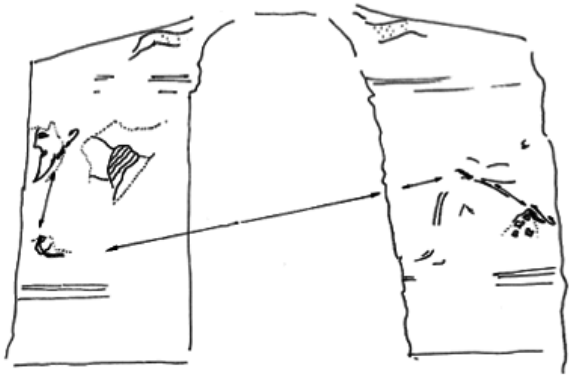


Fig. 4.17: The violent & dangerous activities carried out by masked individuals – example from the *Tomb of the Augurs* entrance wall (Jannot, 1991: 305). The two men are linked together by a rope as they both pull forcefully (a form of wrestling?) seemingly to strangle one another (Jannot, 1991: 305). Both men are bearded, but what remains of the left figure suggests that this is the same false beard worn by a Phersu (Jannot, 1991: 305). They are only adorned by the rope wrapped around their waist, which suggests the mask of a Phersu can be worn without the rest of his expected dress composition (Jannot, 1991: 305).

Through such consistency and repetition Phersu inhabits a fixed space and place within the iconographical repertoire of painted dress, and as such facilitates a specifically programmed social response; it would be shockingly original and unexpected, therefore, to witness Phersu half-naked. However, there is such an exception to the consistency of Phersu's dress, presented in the 520 BC *Tomb of the Augurs*, whereby the fleeing Phersu is depicted visibly naked from the waist down and wearing only his hat, mask, and chiton (see Fig. 4.15). Such deviation from the schematic of Phersu's painted dress identified by this study suggests indication of a modified significance. As if dress, unlike language, cannot formulate new messages on its own, due to its nature as a conservative closed code that replicates and reinforces already established meanings (see McCracken, 1987: 120), then it has the power to subvert or enhance those meanings through alterations to identified norms of dressing. Alteration to an established dress code, such as that identified for Phersu by this study, has tremendous value as a means of propaganda, as it can 'carry meanings that could not be put more explicitly without the danger of controversy, protest or refusal' (McCracken, 1987: 109). The supposed conservatism of dress is conversely the thing that allows it to be impactful, dynamic, and meaningful. This places an emphasis on the modification of the already distinct Phersu in the *Tomb of the Augurs*, which prompts realization of an even more precise sartorial communication beyond that implied by his usual costume.

Altering Phersu's dress, and changing an otherwise uniform composition, communicates a bolder statement, which goes beyond Phersu's uniformed strangeness. Phersu wears a red-bearded mask (Bonfante, 2003: 170) and is thus hidden, concealed and protected. This character seemingly possesses the luxury of anonymity, but he does not. The mask with its impractical beard and silenic features is distinctive. It is an indicator of Phersu. The conical hat with its Phrygian undertones is also a distinctive and revealing marker when combined with this mask. Phersu cannot hide behind the mask, as the mask has become what he would wish to hide. The actions of Phersu are attributed to Phersu. The short fringed animal-skin chiton accentuates this point, as it is tightly fitted, black, and mottled with white (Bonfante, 2003: 28). Furthermore, it is worn with a draped loincloth perizoma, which is an unusual and hitherto unseen combination of clothing and adornment types. The ankle wraps are also unusual, and provide minimal support and protection, and are less than ideal for activity. This combination of short chiton, loincloth and ankle wrap present a degree of exposure and unusual distinction. Yet, while Phersu is exposed and can be identified, his wearer is hidden. This implies a separation and adoption of an identity. Furthermore, the movements and gestures of the fleeing Phersu indicate distance and departure from the door depicted on the *Tomb of the Augurs* rear wall (Torelli, 1999: 150). However, while this suggests participation in games held away from the area represented by the door (Torelli, 1999: 150) it is Phersu's larger musculature and size that indicates his occupation of a space and behavioural capability separate from that of other participants.

The deviation of attire in the *Tomb of the Augurs* emphasizes this occupation of a separate space and behavioural capability. The agenda of the half-naked fleeing Phersu is subverted to further stress the lack of accountability for his actions and behaviour. This Phersu can subject an individual to his vicious game without threat of reprisal or ire; but more so than usual he can also dance or judge, and remove clothing with impunity. His mask and hat suppress the limited societal power of his wearers' own identity, and the ensuing character created by the attire usurps a bolder role. This is a role that promotes behaviour beyond the bounds of the usual societal constructions of expectation. The character is signalled as unusual and mysterious by his attire, primarily the hat and mask, and dangerous by not just his bloodthirsty game, but also by his lack of constraint. This is a Phersu not just capable of inciting violent and dangerous activities, but a Phersu able and willing to crash through both sartorial and social boundaries. The fleeing half naked Phersu is at the same time exposed, but not exposed. He is free to act without consequences and without control or oversight; he cannot be caught or stopped. This nudity is not heroic, nor is it servile. Rather it is mischievous, and fraught with possibility. This *Tomb of the Augurs* Phersu can be thought more cavalier than his counterparts. Therefore, the Phersu depicted in the *Tomb of the Cock* cannot be interpreted as Phersu 'in the original Archaic sense' (Steingraber, 1986: 308). Such it is that the other Phersu too cannot be thought of in the '*Augurs*' or the 'Archaic' sense, as this would be to over-look the contextual specificity of the sartorial arrangement.

The half-naked, and out of control, Phersu in the *Tomb of the Augurs* exaggerates the possibilities that lie beyond the constrictive bounds of societal expectation, and so emphasizes the 'transitional phase' of a funerary celebration (see Brandt, 2015: 113; also van Gennep, 1960). This is a critical phase, which temporally suspends normal social life, so as to revel in danger, obscenity, and lawlessness (see Brandt, 2015: 113). Therefore, it is not unreasonable to suggest that Phersu is a theatrical character, perhaps representing the deceased by acting out their turbulent luminal phase of transition. Thus, this examination of Phersu's dress augments Croon's (1955) assertion that Phersu represents spirits of the dead, and re-enacts their appearance (Croon, 1955: 16). Pheru as a theatrical character is evidenced by 1) masks being a means to represent and re-enact (Croon, 1955: 16; also Napier, 1986); (2) the word Phersu is not written besides or above the mask, but indicates the whole figure, suggesting it is referring not just to the mask, but to the wearer of the mask (Croon, 1955: 16); (3) the unusually strong 0.95 associative strength of Phersu's dress, which suggests a kind of stage costume (also see Bonfante, 2003: 28); (4) the etymological connection of 'Phersu' to imaginings of the underworld (see Altheim, 1929); and (5) Phersu's painted context of buffoonery and non-fatal funerary games and performances. Ultimately, the strong associative cohesiveness amongst Phersu's painted dress grouping, alongside typological irregularity and a comparatively low frequency, indicate a character with a defined role that is typified by an essential, obligatory, and formally structured costume like that

found amongst Doric farce (see Bieber, 1961a: 39).

The deceased were too acted out as personae, via performers disguised through the use of masks, at the public portion of their own pompa funebris, and at the orations given beside the rostra, as well as at the ludi gladiatorii, in Roman funeral ritual (Torelli, 1999: 148). Furthermore, the Roman funerary anecdote involving the mime Favor wearing the image of the deceased and imitating both his gestures and manner of speaking, and the fiction of the 'living corpse', reinforces the inherited practice of representing the deceased through both imagery and act (Torelli, 1999: 149). Such mimes provided a range of entertainment, from low face to sophisticated drama, and as an 'imitation of life' mimes spoke, moved, and acted with Phersu's insolent irreverence, free of restraint (Maxwell, 1996: 272). The short, multicoloured, chequered dress worn by Phersu also corresponds to the centunculus, later worn by Roman mimes (Maxwell, 1996: 270). Thus, the theatrics represented in the *Tomb of the Augurs* clearly portrayed a flamboyant, rebellious, humorous, and arrogant character, more so than those acted out in the *Tomb of the Olympiads*, *Pulcinella*, or *Cock*, so as to be represented by such an unrestrained, hedonistic, and unique Phersu. The portrayal of the *Augurs* tomb Phersu provides insight into the representational function of Phersu. This is a function that depicts theatrical performance being used as a means to communicate the turbulent transition to the Afterlife (see van Gennep, 1960). Through the masked costume of Phersu mourners and revellers are presented with a theatrical funerary performance, which permits some general considerations as to its theme and purpose.

Phersu perhaps represents a theatrical parody of the deceased, and an entertaining mockery of societal expectations. However, Phersu is not a mockery or parody of the core Orphic myth (see Avramidou, 2009: 78). An attempt to link this iconography with the mysteries of Orpheus is too dismissive of the Etruscan context and contradicted by numerous particulars, from the theatrical connotations of Phersu's dress to the accompanying funerary setting and celebration (see Leighton, 2004: 113). Albeit, it is likely that bloodshed was ritually necessary to placate the anger of the dead, and to strengthen and protect them against the dangers of the transition to the Afterlife (see Krauspkopf, 2006: 76), but Phersu's costume suggests that this bloodshed was performed theatrically. Phersu is not a god, or a demon connected to death (Semerano, 2006; or Vellucci, 1985: 25). More simply, Phersu is an act, a mask (see Pallottino, 1974: 167). Furthermore, the Latin word 'persona', in the sense of a character in a play, derives from the word 'Phersu' – as evidenced through the etymological investigations of Altheim (1929: 35). There is no indication of mortal combat amongst the buffoonery and bloodshed characterizing Phersu's violent show (Leighton, 2004: 111-112). Thereby, it suggests an imaginative performance encouraging suspension of disbelief and a license to accept Phersu as a fictitious theatrical character acting out funerary spectacle – potentially adopting the persona of the deceased (see Napier, 1986: xxiv). Theatrical appearance is not an obstacle to an inner reality, or to an essence or con-

tinuity of self (Napier, 1986: xxiv), which opens up at the very least the possibility of considering Phersu as theatrically representative of the deceased's persona.

Phersu is connected to death, albeit not as a demon or a god, but as a theatrical character who perhaps acts the role of the deceased's persona. Such a persona would require a manifestation, hence the need for an actor to wear the mask and garb, so as to pictorially usurp the role or character of the deceased. This role of the dead would explain the dangerous and bloody physical contests, of seemingly reckless abandon, that are not of a sporting nature, but are violent, obscene, and undertaken by masked individuals. These are activities such as a climber mounting the length of an oblique perch and performing a dangerous leap; or two masked characters, wearing tight cords around their necks, pulling with all their might, to strangle their adversary (Jannot, 2005: 50; see Fig. 4.17). This is a mask and garb that personifies the Etruscan death cult practices by permitting theatrical performers to carry out such practices with impunity, free of consequence. The theatrically ascribed power, danger, abnormality, and obscenity conveyed by Phersu's dress are too the qualities attributed to the liminal transitory phase of death, which is experienced between the moment of death and the interment of the deceased (see Brandt, 2015: 113; also van Gennep, 1960). Accordingly, the funerary ritual, games, and sacrifices might have secured a safe transition into the deceased's hereafter, and through Phersu theatrically demonstrate the deceased's potential participation in their ritual honours, and (as ancestors) the assistance lent to their descendants (Krauskopf, 2006: 78). This too perhaps identifies the earliest incarnation of the ancestral/familial greeting and departure scenes demonstrated in later 2nd century BC tombs, such as *Tomb 5636* and *Tomb 4912* (see Fig. 5.24)[5].

Group 10b.i's strong associative strength and frequency establishes Phersu as a significant costumed communicative device. His painted dress suggests a theatrical character that was used to navigate funerary ritual and perform the transition to the Afterlife (see van Gennep, 1960). Painted dress is here a tool used to theatrically demonstrate an understanding of the experience amidst the critical transitional phase from this world to the next. Albeit, given the limited frequency of Group 10b.i it is likely a theatrical performance reserved for those who met specific eligibility criteria according to their social standing and merit (also only male?). It seems likely too that these were those best deserving of the chaos, obscenity, violence, and strangeness wrought by Phersu's theatrics. Those who required or demanded this painted honour so as to portray the emphasized alleviation of their perilous journey to the Afterlife, and those whose persona's had impacted the funerary celebrants enough to ensure a smoother transition through a devoted excess of funerary ritual. It is uncertain whether the 'masked person depicted amidst a funeral performance' is a representation of the spirit of the dead, a re-enactment of transitional

[5] This is evidence of a pre-existing idea changing its form but not its underlying content (see Brandt, 2015). Depicting and attempting to understand the hereafter is a comfort regardless of the iconographical forms, hence the underlying contents chronological durability (Leighton, 2004: 165).

liminal experience, or portraying the appearance of the deceased (see Croon, 1955: 16; also van der Leeuw, 1963: 373), but it is undoubtedly, given its identified strong associative strength and low frequency, a significant and meaningful theatrical costume.

The liminal and malleable qualities of Phersu's mask, which permit its theatrical performances, reflect the less precise 6th - 5th century BC Tarquinian sartorial communication. Such masks project broad revivificational and re-presentational qualities (Napier, 1986: 20) permitting persons to represent 'others' whose 'imagines they wore' (Jevons, 1916: 179). It manages the oppositions emphasized by the sepulchral categories to which masks call attention and it is indispensible in making contact with vaguely comprehensible, often radically dissimilar transitions (Napier, 1986: 20). Masks predominance during such transitional periods attests to their appropriateness amidst contexts of change (Napier, 1986: xxiii). They testify to an awareness of the ambiguities of appearance and provide a medium for exploring boundaries and investigating transitional states (Napier, 1986: xxiii). Later 4th – 3rd/2nd century BC funerary representation, which moves from broader to narrower sartorial communication, establishes a more precise, targeted, and specific reconciliation to this awareness than that offered by Phersu and his mask. Group 4b.i and Group 4.b.ii offer even less precision reconciliation, as their associative strength transitions from the strong 0.98 – 0.95 of the prior groupings to a weaker 0.75 strength. Group 4b.i and Group 4b.ii's frequency also increases from the minimal occurrences of prior groupings to a more substantial 15 depictions, which indicate Group 4b.i and Group 4b.ii as departures from the associative strength, typology, and frequency triumvirate established by the similarly structured Group 5c.i, Group 6c.i, and Group 10b.i.

4.5 - Presenting the Living through Weakly Associated (but Frequent) Painted Dress Part. 2: Variety is the Spice of Life

Group 4b.i and Group 4b.ii (Tree Branch 4) have a weak associative strength of 0.75 and a frequency of 25. Their more frequent and imprecise clothing and adornment type groupings are typical of the means by which painted 6th – 5th century BC dress is used to construct identity, and also the means by which this painted dress is construed (see Boswell, 2006: 445). Tree Branch 4's groupings of dress communicate the multiple social categories that make up identity, whilst also recognizing their broad ambivalence, which drives 6th – 5th century BC painted sartorial communication (see Davies, 1994: 21-29). They demonstrate 'how' the different types of clothing and adornment can 'go together' to form recognizable entities (as per Barthes, 2013: 41; see Table. 15). The types of Group 4b.i and Group 4c.i can 'go together' to present the attire of a dancer, castanet dancer, or reveller (see Fig. 4.19 & 4.20), and the types of Group 4c.ii can 'go together' to present the attire of a synrix or barbiton player, and a banqueter or reveller (see Fig. 4.21 & 4.22). The types of Group 4c.iii do not 'go together'; rather they present stylistic supplements to the types of Group 4c.ii (see Fig. 4.23). The clothing and adornment types can be

pieced together in variable configurations that attest to their overlapping social categories (Colburn & Heyn, 2008: 10). Statistically identified variability reproaches prior painted dress studies that fail to acknowledge such complexity. This variability in 'how' the different types 'go together' is important, and Tree Branch 4 conveys the ambiguous nature of its groupings, and how modifications to painted dress results in shifts of social identity or perceptions of social identity.

Fig. 4.21: C_Type_9 – the banqueter or reveler.

Fig. 4.22: C_Type_30 – the syrinx or barbiton player.

Fig. 4.20: C_Type_6 – the dancer or reveler.

Fig. 4.24: Castanet dancers supposed 'special costume' (Bonfante, 1986:

Fig. 4.23: C_Type_18, C_Type_70, and C_Type_42 – the supplements or alterations.

Fig. 4.19: C_Type_10 and C_Type 51 – the castanet dancer.

For example, castanet players supposedly dress in their 'special costume', a heavy wool plaid jerkin or ependytes worn over a thin chiton (Bonfante, 1986: 238; see Fig. 4.24). A very full, flowing chiton skirt of extremely sheer fabric and fine texture is worn under the ependytes, a short-sleeved coloured jacket of heavy contrasting texture, that represents this 'special dancer's costume', which is regularly worn by figures of castanet players in both Greece and Etruria, usually made of wool and often plaid-patterned (Bonfante, 2003: 38). However, Group 4c.i suggests this special dancers costume is also supplemented by both a loosely draped mantle and tutulus when depicted in the tomb paintings of Tarquinia (see Fig. 4.19). Furthermore, far from plaid and woollen, it seems that the chiton and mantle of castanet dancers in the tomb paintings of Tarquinia are depicted as dyed with bright colours, and brightened further with patterns of dots or small rosettes. The fine folds of the mantle show the finer texture of the material, perhaps linen, in contrast to the heavier, stiffer texture of wool (Bonfante, 2003: 16). The fact that garments with folds are never decorated with a plaid pattern confirms this identification, since linen, in contrast to wool, dyes rather poorly; the original material would thus have been left in

its natural colour or bleached (Bonfante, 2003: 16). The chiton and ependytes of a castanet dancer are also paired with a bandolier, albeit such a pairing is not presented by Group 4c.i (see Fig. 4.25). It is also not a coincidence that C_Type_80, C_Type_39, and C_Type_81 are loosely associated with Group 4c.i, as the bracelet, calcei repandi, and disc shaped earring often act as supplementary accoutrements to the attire of a castanet dancer (see Fig. 4.26).

Tree Branch 4 identifies variability and versatility amidst the painted dress of musicians, revellers, and dancers, which coincides with the 6th – 5th century BC trend of high frequency, but weak associative strength amidst painted dress. For example, the castanet dancers do not have a 'special costume', but rather an array of clothing and adornment types. The categorization of 'special costumes' does not consider the wider sartorial vocabulary that can accompany or supplement such a costume. The term *costume* implies an almost non-existent measure of fixed consistency. Group 4c.i illustrates that it is preferable to identify distinctive and thereby diagnostic garments, rather than attempting to delineate the rigid criteria of a 'special costume'. It identifies the problematic use of the term costume, while simultaneously elucidating the variable configurations of castanet dancers painted dress. There is no castanet dancer's 'costume' because as with speech the meaning and construction of dress depends on circumstances (Lurie, 1981: 12-13). *Costumes* in different contexts might have distinctive structural similarities (Sorensen, 1997: 101), but dress is *spoken* at a specific time and place, not in a vacuum, which alters its meaning and composition beyond the formulaic sartorial constraint of the word 'costume' (Lurie, 1981: 13). Costume is deliberately consistent, and maintains, as well as evokes, its consistency regardless of context. Therefore, unless the costume is fixed like a uniform (e.g. police officer), character (e.g. a clown), or ritualistic garb (e.g. a priest), then it is unlikely to constitute a costume. Castanet dancers are not persistently funerary performers, and thus there is no 'special costume' according to the strong associative strength necessitated by the word.

Fig. 4.25: Balancing girl from the *Tomb of the Jugglers* wearing the supposed dress of a castanet dancer alongside her bandolier and belt (Steingraber, 2006: 95).

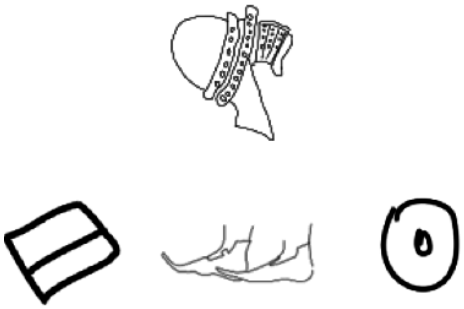


Fig. 4.26: The potential accessories of a castanet dancer's attire. C_Type_80, the bracelet, C_Type_39, the calcei repandi, and C_Type_81, the disk shaped earring.

Group 4b.i and 4b.ii stress the importance of focusing on distinctive and thereby diagnostic garments, so as to bypass the inflexible connotations of a 'special costume'. The heavy wool plaid jerkin or ependytes is the distinctive garment of the castanet dancer; however, it is not the 'special costume'. A 'special costume' imposes a faux, inaccurate, and fixed structure of dress, but this jerkin is variably combined with a chiton, mantle, bandolier, tutulus, calcei repandi, bracelet, or disc shaped earring. Thus, there is no structured costume or set attire. The variability of this dress reflects the choices of a painter depicting any given performer, not a distinct 'character', for a specific audience and context, and also for a specific patron. This echoes the ambiguity of the oft-accompanying funerary banquet, as not all banquets are mournful, and the music, games, dancing, and banquets honouring the dead are also for the pleasure of the living (Leighton, 2004: 106; Powley, 1996: 298). Thus, the ambiguous and adaptable dress of a castanet dancer embodies the inherent ambiguity and ambivalence of both their funerary audience and their funerary context. This variable attire is indicative of the desired or necessary tone, style, duties, or setting of a specific funerary celebration and individual dancer. Insofar as such dance asserted considerable appeal at funerary celebrations, it is the uniformity and consistency of the ependytes, amidst the castanet dancer's myriad of possible dress compositions, which suggests a contracted or professional service. It is postulated that such musicians and dancers were paid actors or performers, rather than mourners (Leighton, 2004: 115). Although far from constituting a costume it seems the ependytes was as essential as the castanet, by signifying an element of professional decoration through the consistent wearing of this distinctive garment amongst a variety of other types.

Group 4c.i also correlates with the idea of appropriate wear for 'active' and 'inactive' participation and behaviour as defined by garment construction (as per Veblen, 2007). C_Type_6, a simple and basic perizoma with sashes, which facilitates complete freedom of movement, exemplifies the principle. Its loose sashes are ideal compliments to a fast, rhythmic, and acrobatic form of dance (see Fig. 4.20). Yet, if such dances and dancers were a part of earthly events then it is prudent to question the practical appropriateness of C_Type_6. The loincloth with sashes offers no protection from the elements, be it exposure to the sun, shelter from the rain, or protection against the cold. Therefore, we can make several propositions: (1) this garment is an idealized depiction or only worn in certain circumstances; (2) significant parts of the funerary event took place indoors or under shelter; (3) portions of the event requiring such attired dancers, in less than ideal circumstances, were either short in duration, re-scheduled, or omitted, if required; (4) dancers altered and adapted their attire as necessary throughout the event; and (5) a measure of confidence, physique, and competence can be assumed on the part of the exposed and vulnerable wearer. The *active* functionality afforded by C_Type_6 is offset by its bare limitation, which necessitates compensation or alteration. Hence, it is important to consider the affect of this garment on a body, in a space, and in a place, as this provides a finer degree of granular insight

amidst an otherwise imprecise and less defined array of 6th – 5th century BC painted dress. Furthermore, it places an emphasis on the detriment of ignoring or overlooking the cues of such dress in dictating the places and spaces of funerary activity. The materiality of this dress prompts a phenomenological realization of not just *activity*, movement, and dance, but also exposure: an exposure to the elements and an exposure of the wearer.

Group 4c.ii and Group 4c.iii demonstrate the contrast between those who are *active* and those who are *inactive*. They do this by presenting the draped style of dress preferred by musicians and revellers, and also the sewn form fitting dress preferred by banqueters. The rounded mantle C_Type_30 is representative of the draped style of garb worn by barbiton, syrinx, kithara, and flute players (see Fig. 4.22). These are *active* individuals, and thereby their form of dress permits unhindered movement and freedom of expression; revellers also wear this loose and draped form of dress. C_Type_39 (the calcei repandi), although initially an essential part of any fashionable ensemble, were it seems more and more reserved for dancers, revellers, and musicians after 520 BC (Bonfante, 2003: 63; see Fig. 4.26). The chiton paired with a rounded mantle (C_Type_9) is more restrictive in its construction, and such layered and covered dress is more common amongst female banqueters (see Fig. 4.21). Furthermore, elaborate accessories in the form of C_Type_81, a disc shaped earring, and C_Type_80, a bracelet, also supplement C_Type_9 (see Fig. 4.26). The wreathed and luxurious hairstyle of C_Type_70 also compliments the banqueter's composition built around the layered style of C_Type_9, and also suggests through its length that it is the dress of an inactive female banqueter (see Fig. 4.23; Lee, 2015: 74)[6].

It is no surprise that such active and inactive groupings of dress are clustered together, as there is a strong 6th – 5th century BC correlation in Etruscan funerary imagery between banqueting, music, and dancing (see Tobin, 2013: 850). This is significant because it is the affect of the type, and its contextualization upon a body in a particular space and place, that influences the *other* content type attributions. It is the properties and materiality of dress that dictates what is possible, what is probable, and so what is attributable. This explains the adaptable nature of C_Type_42, a basic shoe, and C_Type_18, a rounded mantle and cloak combined with a short chiton, as their ambiguous and neutral properties permit association with banqueter, reveller, or musician. The mechanics of the clustering analysis are such that it does not separate strongly associated clothing and adornment types that make up the different but related attires of banqueters, dancers, and musicians. This demonstrates the necessity of considering not only 'how' the pieces of clothing and adornment types can 'go together', but also the need to examine affect and effect. This is so as to accurately attribute their roles, characters, and processes, namely

[6] Dancers and revelers can wear the banqueter's attire, and vice-versa. Such dress can be inconsistent in its 'other' content type associations (outside of ritual/character things are variable) in the 6th – 5th centuries BC.

their *other* content types. The clustering analysis cannot autonomously sort cases and variables to this degree of accuracy. The inherent variability of 6th – 5th century BC painted dress, which can confound analysis through its wide-ranging 'other' content type applicability, and weak associative strength, requires the compensation of such a phenomenological interpretation.

The disappearance of the clothing and adornment type compositions presented by Tree Branch 4 aligns with the profound iconological change in Etruscan funerary art around the middle of the 4th century BC (Brandt, 2015: 105). It is at this time that the Archaic and Classical presentations of lively funerary rituals with banquets, music, and dancing, performed in the world of the living to help the deceased on their journey to the Underworld, are replaced by representations of the journey in the liminal, infernal boundary space itself, that introduce Aita (Hades), Phersipnai (Persephone), and ugly demons, the most frequent ones named Charun and Vanth (Brandt, 2015: 106-107). The lack of musicians, dancers, revellers, and banqueters in Tarquinian tomb painting from the mid 4th century BC onwards necessitates a lack of their dress, which signifies such funerary behaviour. Only C_Type_51, C_Type_80, C_Type_81, and C_Type_70, best described as the compositional accessories, persist into the 3rd century BC. This reflects the recursive but significant capability of dress to invoke concepts of personhood, place, and space. The absence of these types indicates a change in the strategy of non-verbal information exchange (Brandt, 2015: 152; also Wobst, 1977). The form, the way in which the content is presented, was re-tailored to suit the 4th – 3rd/2nd century BCs narrower and more precise sartorial prioritization. The broader and less precise 6th – 5th century BC sartorial perspective toward death and burial, demonstrated by painted dress's high frequency, but weak associative strength, was abandoned in favour of a more precise perspective. Group 7c.i and Group 7c.ii enhance the identified 6th – 5th century BC sartorial perspective as they continue to demonstrate more frequent, but weakly associated dress groupings. They lack the targeted sartorial specificity wrought by prior groupings, which conveys the period's dominant communicative priority, or rather the lack thereof.

4.6 - Organizing a Banquet through Weakly Associated (but even more frequent) Painted Dress pt. 1: Knowing your Place

Group 7c.i and Group 7c.ii (Tree Branch 7) too have a weak associative strength of 0.72 and a frequency of 40. Through these two frequent groupings of painted dress it is apparent that painted funerary organization was broadly predicated on 'knowing your place'. For example, it is possible to identify linen corselets, such as C_Type_7, with a high degree of certainty in Etruscan tomb painting (see Gleba, 2012: 48). It is dress of the active, a military dress fashioned with a predisposition toward hierarchical structure and contrast. A contention surrounding the protective qualities of linen armour, which had already been questioned during antiquity, highlights the ambiguity of this 'military attires' form and function (Gleba, 2012: 45). The high tensile

strength and low breaking extension of linen is offset by its inability to resist penetration when laid against the skin (Gleba, 2012: 47). It is likely that such armour gave protection to hunters against animal bites, but was useless against the blows of a metal weapon, and thus used only when hunting (Gleba, 2012: 47). However, a linen garment treated with vinegar and salt can make it protective against weapons (Gleba, 2012: 47) and as efficient as bronze (see Aldrete, Bartell, & Alderete, 2013). Furthermore, it is light, flexible, and does not require the more valuable metals, which would make it an attractive military garb for a warrior (Gleba, 2012: 48). Hence, C_Type_7 typifies not only the dichotomy of Tree Branch 7 between contrasting *other* content type associations, and *active* and *inactive* clothing and adornment type properties, but also the delineations between and within active and inactive boundaries of painted dress.

C_Type_12 does not typify Tree Branch 7's core dichotomy. C_Type_12 is inactive and it fits with the *other* content types associated with this tree branch. Its restrictive combination of short-sleeved chiton and draped mantle align with the 'inactive' banqueting accoutrements presented by the *other* content types, such as an amphora, krater, stool, and kylikeion (Rathje, 2013: 824). The restrictive bodily properties and sumptuous decorations of C_Type_12 are not as divisive as the properties of C_Type_7. It is difficult to envisage an individual wearing C_Type_12 hunting anything other than a *hors d'oeuvre*, and fighting with anything more challenging and dangerous than a cupbearer. The contrast between C_Type_7 and C_Type_12 expresses hierarchy amongst a funerary banquet, which is too a device designed to exhibit power, wealth, and status. This is a hierarchy identified by a phenomenological examination of the clothing and adornment types of the participants partaking within painted banquets, versus those merely surrounding a banquet (attendants, entertainers, athletes, etc.). The fitted, sewn, decoratively elaborate, and lengthily draped properties of C_Type_12 allude to the garment adorning men and women reclining, standing, or sitting at a funerary banquet without being overly active participants in the periphery honorific activities. To partake in a banquet served as a paramount status marker, both to the host and to the participants (Rathje, 2013: 825), and this is reflected in their luxurious 'inactive' attire that is served by the attire of the 'active'. Thus, C_Type_12 is at the very top of the banqueting sartorial hierarchy by virtue of its comparatively prohibitive bodily properties. To run, jump, wrestle, fight, box, hunt, or chariot race, an individual wearing C_Type_12 would have to significantly modify and adapt their attire, alter the way it is worn, or change into altogether more suitably practical attire. Therefore, the dichotomy of Tree Branch 7 is that it delineates between the 'active' and 'inactive', or rather it deciphers the banqueting sartorial hierarchy, which is communicated by the properties of dress impacting bodily affect.

Dress enables and encourages, or prohibits and restricts, behaviours, performances, and practices (see Schiffer, 1999: 30-50). The active and the inactive are defined by the constructional properties of their painted dress (see Eicher & Roach-Higgins, 1992: 2; also Fig. 4.19). However,

these terms are but labels used by this study to communicate a plethora of varying activity. The active label encompasses a specific yet vast range of potential action. The inactive label encompasses a dissimilar yet still vast range of potential inaction (relative to the 'active' action). The constructional properties of dress dictate the label - the potential level of activity - that can be affixed to that piece of dress. They determine how a piece of dress can be worn, and its subsequent bodily affect. To be active is to be able to move relatively freely and to be inactive is to not be able to move as freely. Dress can restrict or immobilize the arms, the legs, the head, the eyes, the waist, the hands, the fingers or the feet, to varying degrees, but in contrast it can also provide full ambulatory ability. The dress of an active dancer (even a spontaneous dancer) permits dancing (to varying degrees)[7]. Furthermore, the armour of an active warrior protects and permits its wearer to fight. Thus, the dress of an inactive banqueter must be comfortable and appropriate for the occasion of banqueting, and not that it be entirely suitable for dancing or fighting. That is not to say that the inactive do not move, or are completely immobile or paralytic, but that their attire is not fashioned to be active. Therefore, the hierarchical banqueting sartorial scale intentionally communicates the active and inactive performances enabled by painted dress, and consequently the expected or unexpected societal structures amidst (albeit painted) processes of burial.

The association of an active clothing and adornment type (C_Type_7) with an inactive clothing and adornment type (C_Type_12) is indicative of the sartorial banqueting hierarchy governing 6th – 5th (and some 4th) century BC painted funerary banquets. This hierarchy encapsulates the 'inactive' surrounded by the honorific and entertaining activity provided by the active. It is those who are inactive that have the power and status to command, enjoy, and commission such activity from those who are active. The inactive are those who can afford to be inactive, they are those who can choose to do comparatively little to justify their presence (socializing?), while the active have to do something more substantial. This is something for the benefit or entertainment of those who are inactive, but it is also something in which the active have been instructed to perform, by those who are comparatively inactive, so as to justify their continued active presence. The distinctive contrast in bodily affect between C_Type_7 and C_Type_12 emphasizes the sartorial banqueting hierarchy running through Tree Branch 7, and their boar and boar hunt *other* content type associations aptly links these clothing and adornment types to the 410 BC *Tomb of the Querciola I*. It is not too dissimilar from the 490 BC *Tomb of the Biga*, whereby the upper tier of the wooden spectator stand is reserved seating for the more dignified and well dressed inactive fans, while the lower level is taken up by lounging or active nude spectators without seating (Vellucci, 1985: 27). The active sporting participants in the *Tomb of the Biga* are too nude, partially clad, or wearing armour. 'There is a clear distinction between the clothed

[7] Although, attire that can be used to dance is not necessarily the attire that should be used to dance, or the attire that is expected for dancing i.e. a tuxedo wearer performing a break dance would be unexpected and unusual, but such a wearer performing a slow dance would be expected.

masters and the naked servants or slaves' (Steingraber, 1986: 289). Theirs is a separation of sartorial hierarchy, and not a distinction between an earthly and sub-earthly space (see Torelli, 1999: 156; also Brandt, 2015: 169).

The *Tomb of the Querciola I* with its unusually high walls, on which the figured paintings are arranged in two superimposed friezes and pediments, openly conveys such a sartorial banqueting hierarchy. The paintings of this tomb depict a full gamut of 'active' and 'inactive' attire, which through their frieze arrangement reflects the sartorial banqueting hierarchy of bodily affect identified by Tree Branch 7. The large upper frieze with its banquet and dance scenes contrasts with the smaller more lively and direct lower frieze with its scenes of hunting and sport (Steingraber, 1986: 338). The upper frieze displays flute players and dancers wearing loosely draped cloaks with boarders, reclining men in cloaks, cupbearers and servants in robes, female dancers wearing chitons and cloaks, a helmeted warrior on a biga, and most figures seem to be wreathed or to have diadems, and also to be wearing sandals or footwear of some description (Steingraber, 1986: 338). The lower frieze presents warriors wearing helmets and mantles, nakedness, men with mantles around their hips and carrying spears, a rider with a shoulder mantle, a woman wearing a chiton and cloak, hunters wearing an assortment of robes and mantles, and most are barefoot, and without wreaths or diadems. Furthermore, the rear and entrance wall pediments depict two armed and armoured warriors leading horses (Steingraber, 1986: 338). A shoe in one frieze, diadem or wreath in another, and a helmeted warrior, robed hunter, or wreathed cupbearer in yet another, creates a more or less identifiable, but far from straightforward, banqueting sartorial hierarchy based on garment properties, bodily affect, and method of wear.

The contrasting active and inactive forms and properties of the clothing and adornment types in Group 7c.i and Group 7c.ii (demonstrated by the *Tomb of the Querciola I*) permit several realizations concerning the painted banqueting hierarchy: (1) footwear is important and can indicate position within the hierarchy; (2) wreaths and diadems are also important and can too indicate an individual's place in the hierarchy; (3) an inactive individual can wear either sewn, tight, restricted, and fitted garments (women?), or very loosely draped garments (men?), but not armour, or boots of any type, or full length cloaks; (4) the inactive also wear a variety of accessories, such as jewellery, (more so women?) and their garments tend to be more lavishly decorated or luxuriously opulent; (5) the active are generally dressed in loose fitting garments, but they can also wear a variety of sewn and tightly fitted chitons, or mantles, hats, armour, and accessories (though often fewer accessories than the inactive); (6) the active are more likely to be completely naked or partially attired; (7) the inactive are unlikely to be completely naked but are often partially attired, especially the men; (8) the attire of the active is usually less opulent and decorated than the inactive; (9) only the active wear any type of armour, boots, or cloaks; (10) short hair is

more or less the norm for the inactive (more so men than women?); (11) an active attendant/servant is most likely to wear a basic waist wrap or simple chiton with limited personal adornment; (12) the sartorial crossover between those who would be active and those who would be inactive can be partly deciphered by their method of wear; (13) the relationship between dress, bodily affect and role, status, and activity is not always logical, accurate, or practical; (14) there are different gauges and levels of distinction to be had amongst both those who identified as inactive and those who are identified as active by their dress.

These dress realizations unpick the subtleties of painted funerary banquets, as they are criteria from which to determine, for instance, between inactive banqueting participant, active attendant, and in-between entertainer. For example, C_Type_37 is a large and loosely fitted mantle worn over the head covering both shoulders. However, such a descriptor is according to criteria (3) and (5) means that this type could signify either an active or an inactive individual, but criteria (11) in conjunction with criteria (7) and (8) point towards C_Type_37 adorning the active. The method of wear is securely over both shoulders, which covers the chest and permits no partial nudity or exposure, and C_Type_37 cannot be considered opulent or sumptuously decorated. C_Type_37 contrasts the inactive male banqueter represented in the *Tomb of the Lionesses*, who wears a loosely fitted and long mantle with a curved hem, and intricate boarder decoration, which leaves the shoulders and chest exposed, with no tunic underneath, as C_Type_37 is worn by an active individual (see Fig. 4.28). It is most likely worn by an entertainer or an attendant, rather than a banqueter, as it is not luxurious enough, and possesses the wrong constructional properties, and mode of wearing. C_Type_37 communicates its wearers place amongst the hierarchy of funerary banqueting. It presents societal structures, and the importance of recognizing painted dress as an intentional tool, which is frequently used to broadly articulate hierarchy and division.

Distinctive and luxurious dress is not necessarily confined to the wholly inactive, or those who might be called the 'upper class' (de Grummond, 2014: 415). Entertainers, such as dancers or musicians, could be dressed well too, in a hierarchically problematic dress (de Grummond, 2014: 415-416). Although, the well-dressed servants shown in the *Golini Tomb I* at Orvieto, where one of the banquet attendants is nicely dressed in a yellow see-through blouse and bordered skirt or wrap, and another wears dangling earrings, a necklace, a mantle, and a skirt with purple borders (de Grummond, 2014: 416), are not evident in the painted Tarquinian tombs as per (11). Therefore, the relatively simplistic C_Type_37 is placed firmly onto the active – be it an active entertainer (more likely) or an active attendant (less likely). Furthermore, according to criteria (9) and (3) C_Type_60, C_Type_36, and C_Type_48, are also placed onto the active (warrior or entertainer). Problematically, the luxurious nature of C_Type_35 (patterned boarder etc.), suggests an

inactive attribution, but it is worn over both shoulders, not fitted or sewn, loose and flowing, and presents partial nudity, which are criteria speaking more to the active.

The ambiguity of C_Type_35 illustrates criteria (14) and identifies a middle ground between the inactive banqueting participant and the active entertainer. A middle ground populated by dancers, musicians, and revellers (rather than warriors, wrestlers, hunters, or chariot racers). The middle ground conflates the prior criteria so as to attribute attire worn by the inactive participants to those who are slightly more active. However, it could also be that such entertainers were themselves inactive banquet participants. It is not unreasonable to propose that an individual partaking within the honorific banqueting ceremony might also decide to dance, play an instrument, or indulge in revelry. Albeit, the rich attire of some dancers, musicians, and revellers could suggest (as previously discussed regarding castanet dancers) that such active performers marked their profession, skill, or trade, through a distinct adornment. Such adornment signified their purpose or status at a banquet as separated from those also so lavishly adorned. Furthermore, while the simply clad servants and offering bearers are clearly subordinate figures, the same cannot be said for the male and female dancers (Jannot, 2005: 48). They are dressed like the 'masters' reclining at the banquet (Jannot, 2005: 48). Are these individuals household servants, dependents, inferiors, dressed in a manner 'too beautiful for slaves', or are they relatives, members of the clan, participants in the banquet who have momentarily left it to dance a spirited dance of reanimation (Jannot, 2005: 48)? The musicians who accompany them and sometimes dance with them also do not always seem to be servants, and often the dance seems an extension of the banquet (Jannot, 2005: 48). It is difficult to definitively say, but it is this ambiguous level of distinction[8] amidst the *active* and *inactive* that communicates the hierarchical scale of painted dress (see Fig. 4.27). The scale accounts for the frequency, variability, division and multifaceted nature of 6th – 5th century BC painted dress, but also more broadly presents the banqueting sartorial hierarchy.

Fig. 4.28: The 'inactive' *Tomb of the Lionesses* banqueter wearing a loosely fitted and long mantle with a curved hem, and intricate boarder decoration, which contrasts the 'active' C_Type_37 (Steingraber, 2006: 82).

[8] A similar level of distinction was identified between the *Tomb of the Jugglers* juggler and the *Tomb of the Monkey* juggler.

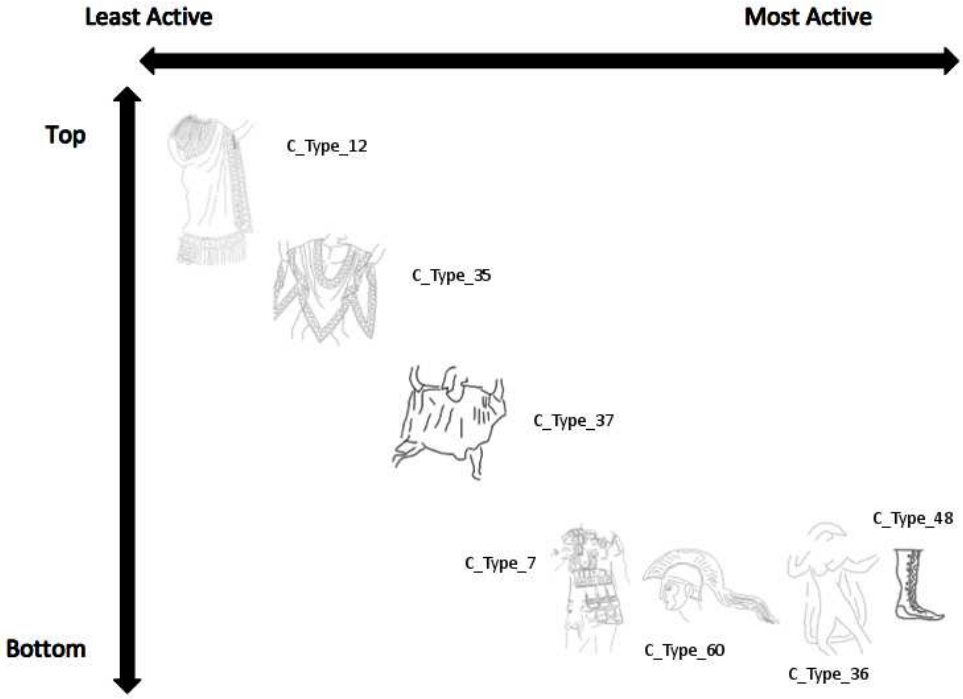


Fig. 4.27: The hierarchical banqueting sartorial scale.

For example, an examination of the hierarchical banqueting sartorial scale identifies a peculiar behaviour of dress amongst the warriors depicted in the rear and front wall pediments of the *Tomb of the Querciola I* (see Fig. 4.29). These warriors are clad in a variant of C_Type_7, C_Type_60, and C_Type_48, but are also adorned with a mantle similar to that of C_Type_35, the triangular shaped mantle. The certain details of appearance, as well as the distinctive decorative patterns, that allow for the clear identification of C_Type_7, are absent in the warrior's depiction (see Gleba, 2012)[9]. This can be attributed to the unreliable nature of the artistic reproductions, and the illegible state of the original paintings (Steingraber, 1986: 338)[10]. The warrior's composition is peculiar due to the active separation between their panoply of C_Type_7, C_Type_60, and C_Type_48, and the unexpected variant of C_Type_35. The triangular shaped mantle (C_Type_35) is not far removed from C_Type_12 on the sartorial scale, and as such it is not expected for this type to form a part of otherwise so active a dress composition. The hierarchical scale of a banquet is predicated on the basis of a correlating relationship between garment construction, bodily affect, and activity/inactivity. Yet, here is an example in which the bodily affect of a garment, which dictates the potential activity level of its wearer, is overridden by the clash of an unexpectedly contrasting composition of dress. This unusual composition suggests a deviation from normal practice for its wearer and acts as a signal to the viewer to indicate such a differentiated intention and role – it potentially signifies a tentative mythological allusion due to similarity with later Dioscuri iconography such as those from the *Casa dei Dioscuri* (see Richardson, 1955). Nonetheless, the relationship between C_Type_7, C_Type_60,

[9] The colour and general style is still correct though. The *Querciola I* examples are potentially a variant in design and decoration to those described by Gleba, 2012: 51.
[10] The paintings displayed in the *Tomb of the Querciola I* have been poorly preserved and so reliant on 19th and 20th century artistic reproductions.

C_Type_48, and C_Type_35 mantle is representative of a useful but anomalous and infrequent amalgamation of the *active* and *inactive* labels.

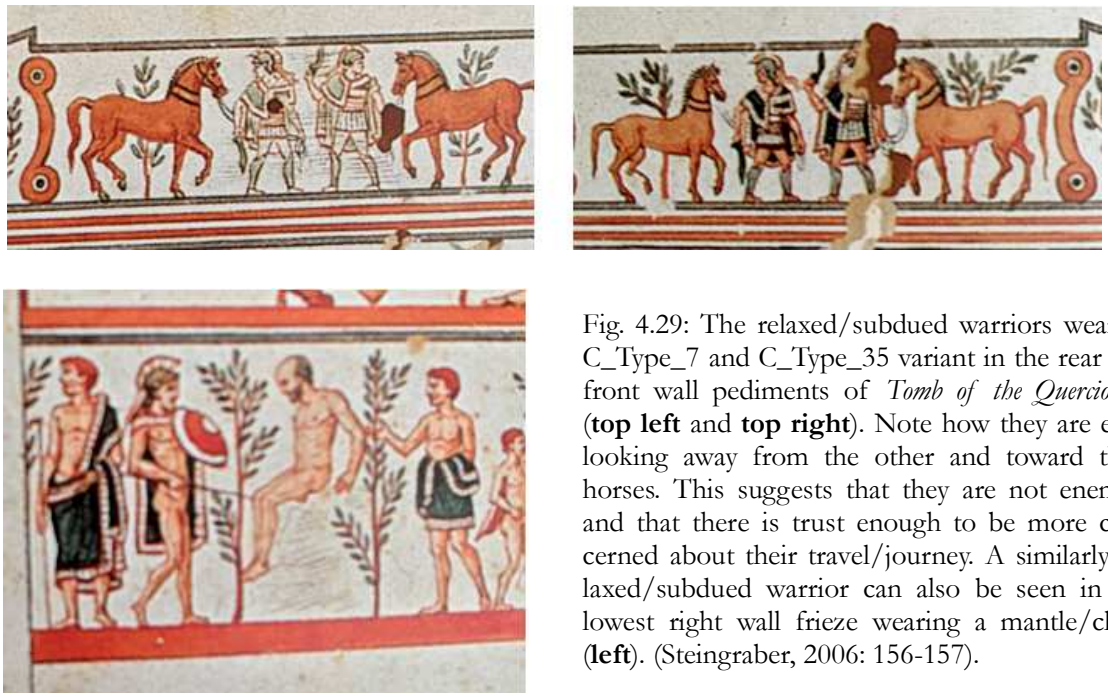


Fig. 4.29: The relaxed/subdued warriors wearing C_Type_7 and C_Type_35 variant in the rear and front wall pediments of *Tomb of the Querciola I* (**top left** and **top right**). Note how they are each looking away from the other and toward their horses. This suggests that they are not enemies and that there is trust enough to be more concerned about their travel/journey. A similarly relaxed/subdued warrior can also be seen in the lowest right wall frieze wearing a mantle/cloak (**left**). (Steingraber, 2006: 156-157).

The C_Type_35 mantle obscures (or replaces?) C_Type_7's characteristic shoulder pieces, and is worn over both shoulders. It is fastened at the front under the chin rather than worn pulled over the head, but it retains the intricate tablet woven boarder (see Knudsen, 2012), and mid-calf length. The inclusion of this mantle reflects the 'inactive' state of the warrior's, as the four combatants are at ease, holding weapons (machete?), and leading horses (travelling?) amidst a leafy grove, and not fighting or doing battle. The mantle itself is a poor choice of attire for fighting or battle due to its unwieldy length and unpredictably loose free flowing form of wear, but it is ideal for protection against the wind, cold, or rain. The warriors have temporarily suppressed their active identities and actions as warriors, and adopted the relatively relaxed inactive practices associated with C_Type_35 at banqueting events. A similarly relaxed/subdued warrior (more so), who has removed his linen armour (C_Type_7), is depicted in the bottommost right wall frieze wearing only (naked) a helmet and a similar mantle/cloak (arrived? = narrative flow?), while holding a shield and stick/cane(?) and playing a game(?) with a fellow naked man sat on a rock. Yet, the mantles easily removable method of wear implies its wearer's swift and decisive ability to return to 'active' action (implications for future actions/ability?).

Furthermore, the subdued un-heroic pediment warriors identified by the sartorial scale support the notion that both real life warriors and painted mythical heroes[11] (Italic/Etruscan? Not Achil-

[11] Gleba, 2012: 52 identifies the 'heroic' occurrences in Tarquinia as the *Tomba del Orco II* and *Amazon Sarcophagus*. The warriors discussed in the provided example are not noticeably heroic or mythological.

les?) wore C_Type_7 the corselet made of linen (Gleba, 2012: 54). Thereby, the scale exposes an important occurrence of this linen corselet (C_Type_7) that was hitherto missed and unconsidered (not identified in Gleba, 2012). Thus, the 6th – 5th century BC hierarchical sartorial scale identified by Tree Branch 7 presents some (albeit ambiguous) nuance to painted funerary banqueting, and its surrounding activity, depicted throughout the tombs of Tarquinia, in spite of this painted dress's high frequency, and low associative strength. Therefore, it too is comparable to Group 8a's weaker associative strength and higher frequency, which also retains nuance amidst otherwise broad ambiguity.

4.7 - Organizing a Banquet through Weakly Associated (but most Frequent) Painted Dress Part. 2: Maintaining your Place

Group 8a (Tree Branch 8) has the weakest associative strength of 0.62 and a frequency of 55. It presents (excluding C_Type_25) 6th – 5th century BC painted funerary banquets as displays of conspicuous consumption (see Rathje, 2013: 824). Painted dress is a key component within the banquets processes of display through its sheer frequency, manipulation and shaping of the banquets guests, supporters, and hosts (see Hayden, 2009: 34 & 38). It facilitates access to the underlying social dynamics for depicting funerary banquets through its deliberately tailored signalling that advertises success, and encourages deference (Hayden, 2009: 34 & 36). This painted dress is not just demonstrative of conspicuous consumption, but also of conspicuous waste, and of conspicuous leisure (see Veblen, 2007). It depicts the extra energy, time, and resources so wilfully and frivolously expended on sartorial display. The aggrandizing *inactive* banqueting individuals are dressed to reflect and project their 'pecuniary canons of taste' (Veblen, 2007: 78-110). Through this painted dress it is communicated that the surviving family/lineage member's positions and prominence have not been adversely affected through loss (Weiner, 1988: 134-6). It makes viewers feel the power of the hosting groups, and the ideologies or messages that they are promoting (Hayden, 2009: 38). This is important as the death of a significant family member creates uncertainty as to the ability of surviving members to maintain previous social, production, and political roles (Weiner, 1988: 122-3 & 134-6). Thus, painted dress is used here as a synonym for economic, political, and social success and stability by visibly articulating on-going familial prestige and status (Boone, 2000: 85). The social tools used to convey specific identities or aspirations to identities found in dress are still abundantly accessible as painted reflections of their ascribed values, styles, status, and practices (Roach & Eicher, 1979: 15).

Tree Branch 8 demonstrates the subtler painted dress nuances of conspicuously consumptive inactive banqueters, rather than broader inter social-group contrasts. These banqueting 'few' (see Pieraccini, 2013: 813) are able to form many different sartorial *sentences*, which communicate their internal group boundaries (Lurie, 1981: 4-5), power, and inequality (see Armada, 2011: 173). Tree Branch 8's large type variability represents the divisions between and amongst the

inactive elite. For example, a woman wearing C_Type_93 (the horseshoe earring), C_Type_84 (a beaded necklace), C_Type_82, C_Type_89 or C_Type_83 (a decorative wreath and hair bands), C_Type_92 (a pair of bracelets), or C_Type_88 (a type of diadem) suggests that she has the available wealth to so lavishly decorate herself for public appearances (Castor, 2010a: 42); more so than a woman wearing only C_Type_84 and C_Type_93. Moreover, distinctive or special garb was required for ritual acts and occasions, which was garb not available to all (Castor, 2010a: 36). The broad arrangements of painted jewellery identified by Tree Branch 8 communicate a variable 'elite status' (see Castor, 2010a: 36). Its internal social group dress type divisions, which trend along jewellery lines, dissect the otherwise homogenous inactive elite men and women, and their particular funerary banqueting sartorial arrangements. It too demonstrates how such arrangements change over time to more precisely redraw these divisions via presenting smaller-scale, and more strongly associated, individual dynamics (see Hayden, 2009: 34).

For example, Group 8c.vi contains C_Type_93 the horseshoe earring (see Castor, 2010a: 29 and Castor, 2010) and also a short wreathed hairstyle (C_Type_67), which form a select group within Tree Branch 8 (see Castor, 2010a: 40). Only Velia Seithiti in the 350 BC *Tomb of the Shields*, the 'lovely' Velia Velcha (Spurinna?) in the 350 BC *Tomb of the Orcus I*, and an unnamed richly jewelled similarly looking (related?) 'elite' woman in the 350 BC *Tomb of the Pilaster and Female Figure* (Steingraber, 1986: 334; see Fig. 4.31) are depicted wearing this earring type in the 4th century BC. Thus, its exclusive depiction has been attributed to a specific 'elite' female role (see Castor, 2010a: 33), which is similar to that of the bronze rings suspended from fibula that developed from indicating an inter-marriage network of political and economic significance controlled by 'elites', to markers of status signalling identification between the ruling 'elite' (see Iaia, 2007). Therefore, it is reasonable to assert in this painted context that the horseshoe earring indicates specific 'elite' women, belonging to specific 'elite' families. For modern scholars these individuals epitomize the status of Etruscan women and the wealth of elite families (Castor, 2010a: 39). Their horseshoe earrings are unique and have no stylistic predecessor, nor did any other culture produce similar ornamentation (Castor, 2010a: 36). Therefore, when these women fastened their horseshoe earrings in place they were defining themselves in a very particular fashion by wearing their uniquely distinctive jewellery, but they also modify the painted Tarquinian portrayal of 'elite' banqueting women. Furthermore, given the familial connections between Velia Velcha and Velia Seithiti, evidenced through tomb inscriptions (see Steingraber, 1986: 329 & 341), C_Type_93 might very well mark relationship to the 'elite' and powerful Velcha family (see Morandi, 1987).

Rather than a key component in a ritual costume (Castor, 2010a: 41) the painted horseshoe earring reinforces the changed place of 4th century BC banqueting women amidst the programme of Tarquinian tomb painting. The unusually bejewelled adornment of both Veilia Seithiti and

the 'lovely' Velia is contrary to previous painted female banqueting attire, which was generally mundane and relied either on indistinct accessories such as C_Type_92 or C_Type_84, or Greek derivatives (Castor, 2010a: 40; see Fig. 4.30). The two Velia's are both an unmistakable contrast to the near androgynous depictions of earlier 6th – 5th century BC female banqueters (see Fig. 4.30). Yet their accompanying banqueting men are still attired in their same C_Type_29 banqueting dress (see Fig. 4.30). The men are also still reclining whereas the women are not; they are instead sitting (see Fig. 4.30). Furthermore, there is a greater emphasis placed upon displaying and communicating masculinity too, through the man's beard, facial structure, skin tone, and sculpted pectoral muscles/chest and different hairstyles (see Fig. 4.30). Previously no great emphasis was placed on artistically distinguishing between men and women, aside from comparatively minor sartorial exceptions (see Fig. 4.30). For example, both men and women reclined together and behaved similarly (mimicry), and no concern for or effort toward such a differentiation was depicted (Steingraber, 2006: 130 & 188; see Fig. 4.30). The later painted banqueting women are no longer displayed as equivalent with the banqueting men. They are not depicted as occupying the same space in the same way as they once did in 6th - 5th century BC tomb painting, and the horseshoe earring is a key indication of this change. It places a hitherto unseen painted emphasis on 'femininity' and the women's elite familial relationships and/or role, and in so doing it highlights their displacement from prior modes of painting Tarquinian tombs.

Fig. 4.30: 520 BC *Tomb of the Leopards* (**left**) banquet contrasted with the 350 BC *Tomb of the Shields* (**right**) banquet (Steingraber, 2006:. 130 & 222).

That a greater emphasis upon Etruscan femininity through painted dress accompanies a painted shift in female banqueting position is not coincidental. This is an intentionally crafted message articulating a modification of desire when it comes to painting an 'elite' woman's place and role at a 4th century BC Etruscan banquet. To sit at a banquet is not the same as to recline at a banquet, or the same as to stand at a banquet. The seated woman is now more of an *active* rather

than an *inactive* banqueting participant. It is difficult to say in what way a woman might now be more active as her sitting could be for either ritual or servile purposes. Yet, the woman is now no longer reclining with the banqueting man, and there is a separation between the previously inseparable banqueting 'couple' (see Bonfante, 1999: 21). The modification of painted dress is appropriate given this adoption of a new identity, persona, place, social position, and ideology (see Fair, 2001: 43 or Boswell, 2006: 445). It emphases tomb painting's new artistic direction and the abandonment of what came before, and thus it is doubtful that the painted horseshoe earrings served as anything more than clear indicators of a new means and mode of depicting Etruscan women in Tarquinian tomb painting. There is no presence of the ritual composition found by Castor (2010a: 41) on votive sculptures, as there are no relief pendants or relief pectorals accompanying C_Type_93. This is indicative of the circumstantial evidence linking rich jewellery and dress with religious ritual (see Castor, 2010a: 36). C_Type_93 indicates that the method of painting women at 4th century BC banquets has changed alongside their depicted clothing and adornment types. It had evidently become important to stress femininity when painting funerary banquets (see Fig. 4.31), and this new painted sartorial focus is perhaps wrought to articulate their new and more 'active' seated position, which better reflects their (newly?) modified status and role within their 'elite' family.

Fig. 4.31: The 'lovely' Velia from the *Tomb of the Orcus I* (Castor, 2010a: 39) and her almost identical counterpart from the *Tomb of the Pilaster and Female Figure*. They are unmistakably feminine individuals who are wearing similar attire (jewellery and all) similar to their counterpart in the *Tomb of the Shields* (see Fig. 4.30). Influence of Hellenistic art? (Steingraber, 2006: 197 & 334).

The changed mode of painting women in Tarquinian tomb painting is conveyed to the viewer in part through C_Type_93. The banqueting man and woman are most distinct from one another

when represented alongside C_Type_93. It reinforces femininity and is a more precise component amidst Tree Branch 8's broader sub-division of elite 'inactive' banqueters. The wearer is defined an 'elite' woman, but a woman who is now seated and no longer reclining whilst banqueting with 'elite' men. There is a stark difference between the banqueting 'elite' women in the 480 BC *Tomb of the Leopards* and the banqueting 'elite' woman in the 350 BC *Tomb of the Shields* (see Fig. 4.30). The *Tomb of the Leopards* represents women who are reclining and wearing C_Type_63 (the same hairstyle as the men), C_Type_13, and C_Type_82. Beyond the jewellery and skin tone there are no noticeably 'feminine' aspects to the banqueting women in the *Tomb of the Leopards*, and they could be more or less interchanged for the C_Type_29 wearing men (see Fig. 4.30). The woman in the *Tomb of the Shields* is sitting and not reclining (previously only servants and active stood/not recline), and wearing C_Type_15 (a change), C_Type_38 (also a change), C_Type_93 (another change), C_Type_84 (a change), C_Type_92 (a continuity), C_Type_82 (a continuity), and a ring (a change). There is also only a single woman and a single man in each painted banqueting frame, which is reflective of their more individualizing traits (Roth, 2013: 193) and precise 4th – 3rd/2nd century BC mode of painted sartorial characterization.

The generic jewellery types of Group 8c.ii, Group 8c.iv, Group 8c.i, and Group 8c.iii, seen frequently, but disparately throughout prior centuries, coalesce upon the female wearers of C_Type_93 to unmistakably accentuate their modified 4th century BC painted depiction (see Fig. 4.30). Females depicted in earlier 6th – 5th century BC tomb paintings normally wore only one piece of jewellery, often a necklace (Castor, 2010a: 40). Thus, the greater amount of focused sartorial accessory represents a new artistic direction for Tarquinian tomb painting, and expresses a modified need to more precisely indicate and stress 'elite' women and their position or role within a particular 'elite' family. The abandonment of bodily mimicry between 4th century BC banqueting couples, and the greater attention given to female and male depiction, also suggests an alteration to painting banqueting social dynamics. The man is depicted in the superior and more commanding inactive banqueting position, and the rich adornment lavished upon his female companion serves to extend his own 'elite' economic, political, and social position. The C_Type_93 wearing 4th century BC women who are painted banqueting are re-consigned to that of a luxurious banqueting accoutrement akin to gold, ostrich egg, shells, faience, or silver.

Velia Seithiti and Velia Velcha (Spurinna?) are depicted as extensions of their families' success and stability as exhibited at funerary banquets, by acting as luxurious decorative components of the banquet, rather than orchestrators, participants or beneficiaries of the banquet. They are prominently suggestive of the 'elite' status of their family through the modified sartorial accentuation used to enhance depiction of their femininity. Therefore, although jewellery is a regular feature in painted Tarquinian depictions of female dress (see Castor, 2010a: 32), in the 4th –

3rd/2nd century BC it is wielded with precision per its trend of lower frequency, but stronger associative strength. Whereby, jewellery in 6th – 5th century BC painting is wielded with less precision, per its trend of high frequency, but weak associative strength. Thus, the 4th – 3rd/2nd century BC Tarquinian tomb painting mode of depicting jewellery is indicative of a change in the way that 'elite' women were deliberately portrayed and utilized amidst funerary art - as evidenced by contrast with their prior 6th – 5th century BC depictions. Yet, the increased painted objectification of women through the inclusion of more jewellery, and their changed painted bodily position, is only suggestive, and not necessarily reflective, of wider societal developments and change concerning the status and role of 'elite' women[12]. However, their shift in depiction does identify an apparent need (of the Velcha family at the very least) to more precisely non-verbally articulate and so more clearly stipulate the position, role, and status of 'elite' women when decorating their tomb's with paintings.

4.8 - Conclusion

This chapter identifies the segmented structure of 6th – 5th century BC painted dress groupings, which form clearly demarcated entities. Group 5c.i, Group 6c.i, and Group 10b.i form an infrequent entity defined by strong associative strength, whilst Group 4bi, Group 4.ii, Group 7c.i, Group 7c.ii, and Group 8a form a frequent entity defined by weak associative strength. The infrequent entity is significant because its relationships are the exception, which highlight the norm. Trends of high frequency, but weak associative strength amidst painted dress define the 6th – 5th century BC. The statistically identified groupings of painted dress – the tree branches - present the hitherto overlooked painted arrangements of dress, and their significant manipulation of body, space, place, boundaries, value perspective, and narrative. It recognizes the utilization of a generally imprecise Tarquinian painted-dress code, which orchestrates a patchwork system of non-verbal communication. There is value attributed to 6th – 5th century BC painted dress, but as discussed in the next chapter its specific and precise manipulation is limited compared to later 4th – 3rd/2nd century BC painted dress. The 6th – 5th century BC tree branches identify deliberate manipulation of distinct or mundane types of dress, 'active' or 'inactive' types of dress, strangely worn types of dress, expected types of dress, unexpected types of dress, or contextually and spatially inappropriate types of dress. They emphasize the broader 6th – 5th century BC processes of sartorial manipulation, which range from the strong, but infrequent 0.95 – 0.98 entity to the weak, but frequent 0.62 - 0.75 entity. This variety of illustration identifies the significant patchwork disparity between the narrowly precise and broadly imprecise utilization of 6th – 5th century BC painted dress. The 6th – 5th century BC sartorial strategy of information

[12] Particularly given the amount of personal adornment contained in early 'Orientalizing' Etruscan burials (see Sannibale, 2013).

exchange (see Wobst, 1977) is less defined, more malleable, and most often lacks a specificity of perspective and priority toward death and burial.

Tree Branch 5, Tree Branch 6, and Tree Branch 10 are exceptions to the overall lack of 6th – 5th century BC sartorial specificity. For example Tree Branch 5 (0.98) and Tree Branch 10 (0.96) convey precise sartorial arrangements painted to include the dead amongst depictions of funerary activity, and to enable their participation. Furthermore, Tree Branch 6 exemplifies the co-option of painted dress as a communicative device. It identifies an otherwise hidden competitive predisposition within the decorative arrangement of the *Tomb of the Jugglers*. This predisposition goes beyond articulating a unique Etruscan depiction, to instead espousing a more intimate, personal, and individual funerary organization. This is an organization that revels in competition and challenge, and thus necessitates a thorough consideration of the affect of dress on a body, in a place, and a space. Later 4th – 3rd/2nd century BC sartorial specificity is also echoed through closer examination of the few strongly associated 6th – 5th century BC tree branches. For example, the depiction of Phersu represents the ancestral/familial greeting and departure scenes demonstrated in later tombs, such as *Tomb 5636* and *Tomb 4912* (see Fig. 5.24). Tree Branch 5 too expounds the relationship between the living and the dead, and their space and place, by deploying a transformative amuletic style. This is a style that appropriates the painted narrative, so that despite the reduction of the human figures, the 'great protagonist' in the *Tomb of Hunting and Fishing* is not just nature (see Haynes, 2000: 229), but the distinctively dressed man and woman in the supernaturally displaced tympanum. This is a couple fashioned amidst their funerary celebration, but drawn to be more than worldly, albeit they are not quite yet occupying the later artistically imagined Underworld (see Haynes, 2000: 229).

However, Tree Branches 5, 6, and 10 are infrequent examples of strongly associated groupings of 6th – 5th century BC painted dress. Tree Branch 5 and Tree Branch 6 each have a frequency of 1, and Tree Branch 10 has a frequency of 7. It is the weaker, more frequent, and less precise Tree Branch 4 (0.75), Tree Branch 7 (0.72), and Tree Branch 8 (0.62), which group the majority of 6th – 5th century BC painted clothing and adornment types into their organizational structures. Tree Branch 4 exposes the limitation of discussing painted dress in terms of rigidly structured 'costumes', and the benefit of examining distinct individual pieces of dress, as well as disruptions to patterns of dress. The groups of Tree Branch 4 stress caution in attributing or identifying patterns of supposed 'costume', and tell that care is needed in the application of laden terminology such as 'costume'. This terminology dictates the degree of engagement with what might be erroneously labelled dress, clothing and adornment, uniform, costume, or fashion. Additionally, as well as providing examples of 'how' different clothing and adornment types 'go together', Tree Branch 4 underlines key changes in the form of later Classical and Hellenistic painted dress, which signal profound sartorial (if not social) upheaval (see Rouveret, 2014: 252).

It too presents the broad modes of dress used to articulate the *living* and to refine conceptions of social order. Moreover, Tree Branch 7 and Tree Branch 8 express the hierarchical structure of funerary banquets, and the importance of sartorial strategy in their organization.

Tree Branch 7's identification of the hierarchical banqueting sartorial scale emphasizes phenomenological considerations of painted dress. The predication of the hierarchical banqueting sartorial scale that there is a relationship between garment construction and bodily affect broadens Tree Branch 6's narrower perspective of the active and inactive. The form and mode of dress facilitates or hinders an individual's activity on purpose (for a sporting event, employment, banquet, or service), by accident (forgetfulness or fortuitousness), or through ignorance (misinformed or stupidity). The scale carves a hierarchy through painted funerary banquets and prompts recognition of the role and importance of the artistic value perspective consciously (or unconsciously) placed upon depictions of dress. Also, Tree Branch 8 charts the depiction of painted female banqueting attire and its changing emphasis from broadly articulating their participation (6th – 5th century BC) to narrowly articulating their place (4th – 3rd/2nd century BC). This is most evident from their change in bodily position (reclining to sitting) and the introduction of horseshoe earrings alongside more ubiquitous female accoutrements (see Fig. 4.31). Tree Branch 8 betrays a motivation driven by familial need (namely the changed funerary representation of elite women that increases their objectification via inclusion of more jewellery and suggests their changed familial role and position), and the resulting shift in non-verbal communication strategy from painting funerals as they were commemorated, to painting funerals as they were characterized. This change suggests that the sartorial strategy of information exchange is not altered without modification to its underlying precepts, intentions or targets; be that a change in motivation, beliefs, practice, or behaviour (see Wobst, 1977).

Tree Branch 5, 6, and 10 emphasize the rarity of strongly associated, and thereby rigidly structured and narrowly precise, 6th – 5th century BC groupings of painted dress. Conversely, Tree Branch 4, Tree Branch 7, and Tree Branch 8 stress the prevailing 6th – 5th century BC commonality of broadly imprecise and weakly associated groupings of painted dress. This classification of the relationships between the painted clothing and adornment types identifies a 6th – 5th century BC lack of sartorial specificity. This is to say aside from infrequent exceptions there is no demonstrable effort made or priority assigned to precisely communicate through painted dress. Albeit, such rarity of structured costumes highlights the strongly associated ensembles of Tree Branch 5, Tree Branch 6, and Tree Branch 10 as particularly manipulative. Yet, the otherwise sheer variety of 6th – 5th century BC painted dress, and its high frequency, suggests that such targeted sartorial manipulation was not favoured. Instead, 6th – 5th century BC painted dress provides a broader perspective toward death and burial, which is not so focused on death that it neglects the nuances of burial. Such sartorial imprecision is drawn to commemorate, rather than

to precisely characterize death. There was evidently no pressing need or desire to non-verbally communicate with strict and strongly associative sartorial precision in 6th – 5th century BC Tarquinian tomb painting. They provide a seemingly commemorative canvas, which was open to broad and varied individualistic expression through dress.

5. Data Interpretation (4th – 3rd/2nd Centuries BC)

5.1 - Introduction

The data analysis presented in chapter 3 also statistically identified structures, the tree branches, of painted dress for the 4th – 3rd/2nd century BC. These tree branches communicate a trend of low frequency of dress depiction, but strong associative strength between clothing and adornment types (see Fig. 5.1). The stronger associative strength of these tree branches narrows their non-verbal capabilities, and more thoroughly depicts the manipulation of painted dress to codify and emphasize specific components of death and burial. They articulate the shift in painted perspective from the broad 6th – 5th century BC presentation of funerary commemoration in the world of the living, to the narrow 4th – 3rd/2nd century BC characterization of the deceased's journey in the liminal, infernal space (see Brandt, 2015: 152). The statistical codification of 4th – 3rd/2nd BC painted dress identifies it as more defined, but less malleable, variable, and frequent than earlier 6th – 5th century BC pictorial organizations of dress. Significantly, the 4th – 3rd/2nd century BC tree branches classify narrower patterns of painted dress, which are infrequent and prioritize more precise and formulaic non-verbal communication. This chapter examines how Tree Branch 1, 2, 3, and 9, draw and populate liminal boundaries, and discern between relationships of individuality, family and death. Their modification to the 6th – 5th century BC trend of low associative strength, but high frequency, represents a key alteration to the 'strategy of information exchange' (see Wobst, 1977). The minority of painted tombs from the studies sample belongs to this period, which number 16 for the 4th century BC and 17 for the 3rd/2nd century BC. This chapter too analyses their differing arrangements of painted dress by investigating the relationship between their associative strength, frequency, and typology.

The painted clothing and adornment type groupings analyzed in this chapter progress from the strongly associated to the less strongly associated. Their frequency too, with the exception of Group 9c.i and Group 11a, progresses from infrequent to more frequent. These groupings provide an immediately visible mechanism of signification because of their narrower precision. For example, Vanth's 'crossed bands, folded over girt tunic under her breasts, and detached sleeves or doubled bracelets' (Tuck, 2009: 251) definitively signifies Etruscan conceptions 'of the physical embodiment of death itself' (De Marinis, 1966: 1089). Charun too is a distinctively dressed and unmistakable 'demon of death' (Stoddart, 2009: 47). The groupings continue to manipulate key themes of dress, body, space, place, boundaries, value perspective, and narrative, and the structure of this chapter demonstrates their differing ranges of manipulation. This manipulation remains crucial as the groupings move from dressing Vanth to dressing Charun, and from dressing Pygmies to dressing mourners. The frequency of strongly associated groupings, and dearth of weakly associated groupings, posits the narrower and more precise arrangement of sartorial depiction for the period. It recognizes the utilization of a Tarquinian painted-dress code, which

thrives on very particular contrasts and oppositions to orchestrate a stricter system of non-verbal communication. Painted dress is here a precisely wielded tool, which illustrates a 4th – 3rd/2nd century BC sartorial specificity.

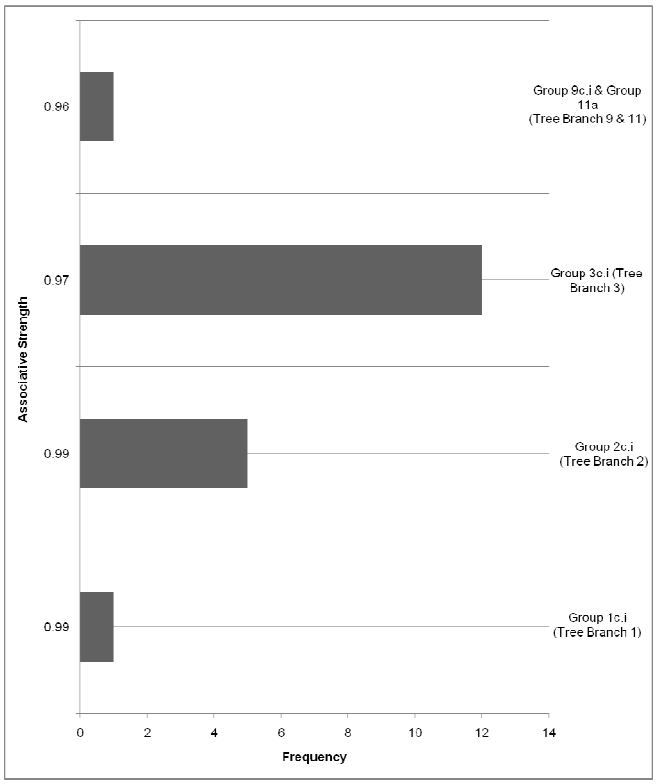


Fig. 5.1: Graph showing the relationship between associative strength and frequency in key 4th – 3rd/2nd century BC dress groupings. Painted dress is infrequent, but the associative strength within the groupings of painted dress is strong. This suggests a narrower and more precise use of sartorial communication.

5.2 - Dressing a Liminal Boundary through Strongly Associated (but most infrequent) Painted Dress: Family vs. Individual

Group 1c.i (Tree Branch 1) has the strongest associative strength of 0.99 and a frequency of 1. The distinctive and recognizable constructional properties of C_Type_5, C_Type_34, and C_Type_56, identify them as the items of dress depicted in the body-less 'weapon frieze' of the 310 BC *Tomb of the Giglioli* (see Fig. 5.2). The detail in the depiction of these types articulates their sartorial specificity and prominent visibility (see Fig. 5.3). The folds of the fabric on the cloak, the cheekbone guards on the helmet, and the carefully sculpted pectoral and abdomen area of the cuirass convey a strong sense of materiality and intentional visibility. This materiality and intent is enhanced by the use of a perspective chiaroscuro painting technique to confer an almost three-dimensional like character to the types (Steingraber, 1986: 309). Furthermore, the vivid use of colour, such as the light yellow of the cuirass and helmet, or the light red of the cloak, reinforces their materiality and specificity. The light yellow of the cuirass and helmet recalls sensations of bronze (Rouveret, 2014: 253) and the light red of the paludamentum implies notions of regality and power (Schieck, 2012: 85). The connection between materiality and intentional visibility is strengthened further by the suspension of these clothing and adornment types from painted nails around the perimeter of the tomb (see Fig. 5.4). This is an indication of

intentional display. The tomb walls are representative of a trophy case. The clothing and adornment types are *hung* and presented to the viewer as distinct *things* to behold. Significantly, this mode of display divorces the clothing and adornment types from their expected context of a body and thereby their core medium of communication.

Identification of Group 1c.i prompts several realizations: (1) there is a specific message, purpose, and intent behind the depiction of Group 1c.i; (2) the types do not adorn a body; (3) there are no individuals represented; (4) painted dress was evidently perceived to still function as a form of non-verbal communication without a body; (5) the clothing and adornment types depicted as hanging on the tomb walls is significant; (6) the painted context for these clothing and adornment types is not clear as there are no painted narrative arrangements that indicate places or spaces. Group 1c.i epitomizes the 4th – 3rd/2nd century BC trend of a strong associative strength between types of painted dress, but a low frequency of painted dress. This relationship defines the 4th – 3rd/2nd century BC propensity to utilize a narrower and more precise sartorial communication, which is to say their arrangement of painted dress is not as variable or poorly defined as earlier 6th – 5th century BC painted dress. Consequently, it is more visible, impactful, and wielded with specificity to curate a message.

Fig. 5.2: The *Tomb of the Giglioli* weapon frieze (Steingraber, 2006: 253).

Fig. 5.4: Painted nail suspension (Steingraber, 2006: 265-266).

Fig. 5.3: C_Type_5 (body armor/cuirass), C_Type_34 (paludamnetum), and C_Type_56 (Phrygian type helmet) – they could form an impactful and effective composition when adorning a body.

The decision to *pin* or to *hang* types of dress from the walls of a tomb is unlikely to have been made on a whim. This decision embodies a specific choice motivated by intent and purpose, as if presenting a text to convey a message (Tilley, 1991: 16). From this it is apparent that there is a non-verbal message at work through these garments, even divorced from their bodily context, but what is it saying (see Goffman, 1976: 70; or Stone, 1965: 222)? What can it say given that it has been removed from the general mechanics of 'how' clothing and adornment presents meaning (as per Barthes, 1990)? Fortunately the detailed depiction of the clothing and adornment types of this group are suggestive of their role as a symbol, emblem, or insignia, rather than as items of dress (Rouveret, 2014: 236; or Ridgway, 2000: 309). As a symbol, emblem, or insignia, they target their intended audience within an imaginatively abstract rather than an explicit bodily context (see Schneider, 1987: 411-15 and Harris, 2003: 70-71). Albeit, the experience of Tree Branch 1's clothing and adornment types held by viewers (Boas, 1955/1927: 12) nonetheless provide a form to their potential wearers, and cultivate interpretation (Miller, 1995: 397) through their *other* content type associations.

There is an intentional display, manipulation, and use of C_Type_5, C_Type_34, and C_Type_56 as forms of non-verbal communication to elicit a desired effect through their unusual, distinctive, and infrequent (unique?) properties (as per Gell, 1998). C_Type_5 and C_Type_56 are both forms of armour. They are designed and constructed to protect. They are worn in battle. Victories and prestige are won in battle. The wearer of such garments implies they are trained to do battle, can do battle, and have been successful in battle. They can fight, and have fought, and will fight. They are made of bronze. They are heavy and impractical for anything but their purpose. To wear them requires strength, confidence, and authority. Yet, C_Type_56 looks almost ornamental. The types do not restrict movement or obscure eyesight. A warrior, former warrior, symbolic, ersatz, or aspirant warrior wore these clothing and adornment types. An observer would have cause to both fear and respect C_Type_5 and C_Type_56. They are synonymous with war, violence, control, power, force, gain, and loss. The paludamentum, or military cloak, serves as a dour reminder of military service, respect, and command (Leighton, 2004: 167; also Schieck, 2012: 86). Their effect is to exhort the military accomplishments and aristocratic social status of the *Pinie* family – the *Tomb of the Giglioli* owners' (Steingraber, 1986: 309). The *other* content type associations of Group 1c.i, such as armour, weapon frieze, greaves, shield, sword, and javelin, reaffirm this projection of great deeds, status, and prestige (Rouveret, 2014: 245). The shield emblems are particularly relevant to this projection of status, as they are of monetary and familial significance, perhaps a coat of arms (Steingraber, 1986: 309).

Yet, absent a body one is left with disembodied garments or cosmetic pots, which are not dress (Lee, 2015: 31). The lack of an adorned body is significant, and so too is the lack of a delineated

space and place. This lack is related to the introduction of decorated sarcophagi, which removes the necessity to depict individuals in the over-arching wall painting schemata, and leaves such spaces open for general exhortations concerning the entire family (see Roth, 2013). The lack of a body wearing C_Type_5, C_Type_34, and C_Type_56 removes the capability of such dress to identify, attribute, and solidify their communicative properties (see Entwistle, 2000). Why merely display the items of the weapon frieze? The message would be more powerful and significant if the items of such a frieze adorned a recognizable individual (see Achilles in Fig. 5.5). A recognizable individual adorned in C_Type_5, C_Type_34, and C_Type_56, while performing a great act or heroic deed would resonate more with the message of prestige and heroism projected by these clothing and adornment types. Unless, of course, you had no great act or heroic deed to which you could directly claim. If this were the case the less attributable and more aggrandizing the representation the better and a generic or formulaic weapon frieze plays this part well, as does a disembodied set of garments. Disembodiment assists a lie, half-truth, deception, or exaggeration. Tarquinian tomb paintings do not lack for hubris, and with such claims to military prowess and aristocratic status implied in the *Tomb of the Giglioli* it is unusual that its clothing and adornment types are deliberately divorced from their heroic and prestigious bodily context.

The divorce from a bodily context places an emphasis on the symbolic space that the clothing and adornment types of this group populate. This is no longer a material or physical space, which is strange given that the muscle cuirass of Group 1c.i (C_Type_5) is made to individual measure (Cowan, 2013: 749). This is a measure that fits and properly aligns the pectoral muscles and a measure so as to adapt for individual contexts of use i.e. the widening of the hips to facilitate riding. This cuirass is a good example of form facilitating function, and it is clearly depicted as having been tailored to fit an individual with very broad shoulders and a heavily muscled chest. It is similar to the poncho cuirass crafted for a chief of Narce in the final quarter of the 8th century BC (Cowan, 2013: 748; see Fig. 5.7). The musculature of C_Type_5 is exaggerated and stylized, with a strong line running from the neck to the belly button, which lends further credence to the notion that it was made to measure, as well as to taste, and intended for a bodily context. Later 4th to early 3rd century BC Etruscan cuirasses have a markedly personalized and stylized musculature, such as the cuirass from the 4th century BC *Tomb of the Warrior* at Orvieto, or two examples from Bomarzo (Cowan, 2013: 751; see Fig. 5.8, 5.6 & 5.9). Therefore, the lack of a body with which to adorn C_Type_5 in the *Tomb of the Giglioli* is perplexing given the specific individualistic and bodily accommodating choices involved in its construction and depiction. To place such a personal, tailored, and almost anthropomorphic garment on a symbolic rather than physical canvas and space is to deliberately exclude the wearer. The absence of a body and yet the presence of dress is also seen in the 410 BC *Tomb of the Maiden* and the 460 BC *Tomb of the Funerary Bed* (see Fig. 5.11). Here too, in the *Tomb of the Giglioli*, as in the aforementioned tombs, this pattern of absence creates a void. This is a void whose empty space betrays

the absence, and in so doing it resonates with the viewer by virtue of its visible and deliberate bodily exclusion.

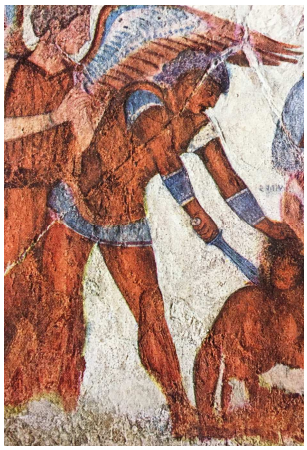


Fig. 5.5: Achilles, clad in a short blue chiton, muscle cuirass and greaves in the *Francois Tomb* (Pallottino, 1952: 117). Tree Branch 1's clothing and adornment types and *other* content types could form such a hypothetical composition – so why was such a composition, which communicates a stronger and more impactful message, not implemented? Why use these forms of clothing and adornment in their less evocative symbolic form? Why not adorn a body?

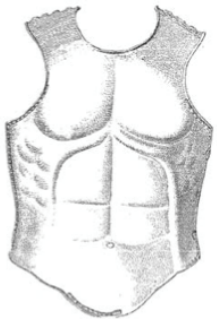


Fig. 5.8: Etruscan cuirass with stylized musculature 475 BC (Cowan, 2013: 749).

Fig. 5.6: Italiote cuirass with naturalistic musculature 400 – 301 BC (Cowan, 2013:

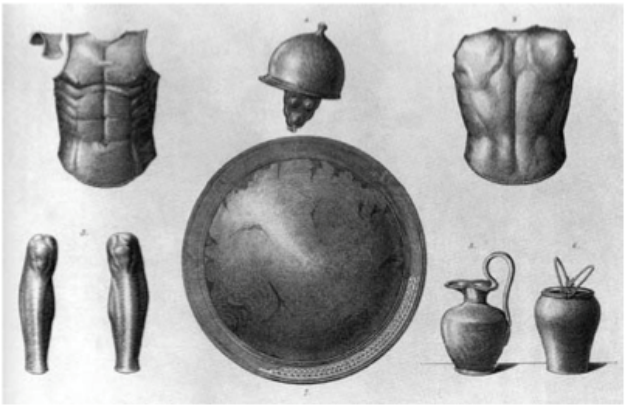


Fig. 5.9: Panoply from the *Tomb of the Warrior*, Settecamini, Orvieto 400 – 301 BC (Cowan, 2013: 748).

Fig. 5.7: Panoply of the Warrior of Lanuvium 475 BC (Cowan, 2013: 748).

Fig. 5.10: Armoured Achle on the Torre San Severo sarcophagus 300 BC. Museo Faina, Orvieto (Cowan, 2013: 755).

Fig. 5.5 (Image: http://tinyurl.com/hrbw57x)

A trend of bodily absence is noticeable, significant, and shaped by the viewer. The form of the empty space created by bodily absence is amplified by accompanying bodily accoutrements. For example, the two cloaks, the two pillows, and the two conical and cippus like 'hats' laid on the enormous ornate bed in the *Tomb of the Funerary Bed* precipitates the symbolic lying in state of two absent persons (Steingraber, 1986: 320; see Fig. 5.11). This is not a normal prothesis scene due to the bodily lack of the deceased, which contrasts with typically practiced (although rarely depicted) prothesis scenes, such as that portrayed in the 510 BC *Tomb of the Dead Man* (see Fig. 5.12). The notable absence of the deceased is compensated by their embodiment in the cloak, pillows, bed, and conical cippus like hats; the cloak that was to be wrapped around their shoulders, the pillow on which they would rest, the bed that would offer them comfort and support, and the hat which would adorn their head. It is much like the *Tomb of the Giglioli* that these objects and items of dress outline a shape that is notable by its absent depiction in the *Tomb of the Funerary Bed*; namely the deceased themselves.

The disembodied clothing and adornment types of Group 1c.i create a more profound empty shape, a shape that is comparable to the figure of Achle on the Torre San Severo sarcophagus (see Fig. 5.10). This figure wears short thigh guards, upper and lower guards on the right and left arm, greaves, and a muscle cuirass. To the *Giglioli* empty shape we can also add a paludamnetum, a helmet, an aspides (shield), a pilum (javelin), and a sword. The shape of a warrior is outlined, but much like the *Tomb of the Funerary Bed*, this is a shape of absence, and it is left to the bodily accoutrements to fulfil viewer expectation. This denied expectation of bodily composition proffered in the *Tomb of the Giglioli* uses the shape of its bodily absence to more precisely, yet less specifically, convey its messages of status. Albeit, a message delivered through such absence bestows no responsibility upon its sender; as this responsibility has been delegated to the interpretative shaping of the viewer. Notably, the thin bronze sheeting used for similar Greek muscle cuirasses (see Fig. 5.41) was too thin to have provided much protection, and so therefore their function must have also been aesthetic rather than practical (Lee, 2015: 206). Surviving Greek muscle cuirasses were modelled to replicate the appearance of well-defined musculature, so as to display the ideal, athletic, body type, and so as to also similarly carefully shape and cultivate viewer perception.

Fig. 5.11: The *Tomb of the Funerary Bed* (Steingraber, 2006: 140).

Fig. 5.12: The *Tomb of the Dead Man* (Steingraber, 2006: 101).

Fig. 5.41: 4th Century BC Greek Muscle Cuirass with stylised musculature (Lee, 2015: 206). C_Type_5's light yellow colour mimics this muscle cuirass's highly polished surface, which would have gleamed in the sun like the skin of an oiled athlete (Lee, 2015: 206).

Removed from the body dress lacks fullness and seems strange, and almost alien, as it is central to the capabilities of dress (Entwistle, 2000: 327). Disembodied dress can only allude and speculate (Olson, 2008: 1), and cannot construct a social persona or establish an identity, or shape the wearer, or permeate their character, or create and regulate social position without its types selectively placed in opposition (as per Barthes, 1973: 25; also Sorensen, 1997; and Lee, 2015: 31). Therefore, the communicative capacity of Group 1c.i is diluted as the messages of its clothing and adornment types lack confidence, decisiveness, and power, because no one owns them; no one is wearing them. They are a hollow, disembodied, empty, and generic gesture because their projected aristocratic, militaristic, and familial status is not wrapped around a body. Without this much-needed dialectic between dress and the body (see Entwistle & Wilson, 1998) it is easier to insinuate a half-truth (Olson, 2008: 1) or to conceal a lie (Lurie, 1981: 24; or Roche, 1994: 4). There is no embodied composition amongst Group 1c.i's clothing and adornment types, so there is no opposition of pieces, and no *sentence* has been constructed to read, and so there is no secure attribution of qualities or meaning.

The lack of an embodied dress composition depicted on the walls of the tomb, and yet the continued inclusion of such compositions on the funerary processions depicted upon the adjacent sarcophagi, and figured sarcophagi lids (Steingraber, 1986: 309), implies a transformed boundary between family and the individual (see Roth, 2013: 195). The half-truth and vague expressions of wealth, power, military accomplishment, and influence painted on the tomb walls relate to the wider family unit, rather than to specific interred individuals. This Tarquinian portion of the *Pinie* familial group cannot make a direct connection to the status they chose to project on the walls of their tomb. The lack of such a direct connection is evidenced in their reluctance to present a fully formed, coherent, and embodied clothing and adornment type composition from the items selected for their frieze (as seen in Fig. 5.5). They cannot, did not, or were unable to present the embodied context to go along with such a composition, so instead they presented the safer and communicatively simplified symbolized versions of dress; the message or statement was not theirs to directly project, hence this compromise. A compromise potentially worn in deference to their ancestors or their familial counterparts attested at Vulci, or to the closing episodes in the war between Rome and Tarquinia (see Steingraber, 1986: 309).

The *Giglioli* tomb clothing and adornment types act as symbols as they lack the embodied power of dress (per Barthes: 1973), which makes it difficult to gauge effect and affect, as well as how and what they might mean. Creating and presenting an embodied dress composition requires confidence, assertiveness and capability, so as to create an effective layer of non-verbal subtlety that projects the commitment, time, thought, and expense required to properly engage dress as a non-verbal communicative system. However, as disconnected symbols Group 1c.i brazenly advertises its type's manipulative intent, and thus casts apprehension on their veracity, and leaves doubt as to their intention. This brazen intent, and de-contextualized manipulation of articles of dress as a direct and disembodied form of non-verbal communication, removes key aspects of their communicative power. They cannot reveal much beyond what they imply as symbols, as they offer no further insight into their bodily context. Their suspicious and obvious intentionality obscures the specificity of their message, but perhaps this was their purpose. A way to legitimately, but tentatively, remember and connect to the message of prestigious status projected by C_Type_5, C_Type_34, and C_Type_56, and their *other* content type associations; a safe claim to past or wider familial achievement, status, occupation, or tradition.

The lack of an adorned body demonstrates that the message of this tomb is focused upon asserting the broader image (perhaps imagined) of family. C_Type_5, C_Type_34, and C_Type_56 represent, but do not adorn this Tarquinian branch of the *Pinie* family, and given the tumultuous conflict with Rome they perhaps did not have much in the way of glory to advertise; hence the use of the familial 'trophy case'. The iconography on the tomb walls reflects the vision of an idealized familial representation (Roth, 2013: 199). The sartorial statement of status, made ostensibly on behalf of the extended, present, and future family, has a familial focus through the lack of individually adorned bodies in its decorative scheme. The tomb walls reinforce the wider familial context, and the sarcophagi provide the space for the individuals enshrined within this context (Roth, 2013: 196). The boundary presented through the clothing and adornment types, in this case through their lack of a bodily composition, is one between the individual and the family. That is to say that the arms frieze adorning the walls of the *Tomb of the Giglioli* is not individually reflective of those interred within the tomb. For most, if not all, it was a backdrop, a familial history or distant connection, representing the perception of a small number of people pertaining to a specific historical moment, place, and space (Roth, 2013: 200). The disembodied dress illustrates this allusion and exaggeration. The military, aristocratic, and wealth connotations were not applicable to most of those interred within the *Tomb of the Giglioli*. The lack of a bodily dress composition implies a borrowed familial message, a carefully tailored sartorial message of aspiration, exaggeration, and slight deception, and a message evidently not secure enough to wear. Group 2c.i proffers a similarly tailored sartorial message, but its increased frequency of 5 and matching associative strength suggests it is a more reliable message with less individually wielded utility.

5.3 – Populating a Liminal Boundary through Strongly Associated (but less Infrequent) Painted Dress Part. 1: Vanth

Group 2c.i (Tree Branch 2) retains the strong associative strength of 0.99. However, it has a greater frequency of 5 and so a stronger, more impactful, less familial focused, visibility. Its consistent distinctiveness expresses a liminal sartorial boundary between the natural and the supernatural, a boundary between the known and the unknown, 'a median strip between the world of the living and the world of the dead' (Torelli, 1999: 156). The properties of Group 2c.i's C_Type_47, a soft-laced ragged boot, and C_Type_20, a garment that leaves the chest bare with cross-straps across the breast, and a rolled short chiton around the waist, are distinct and defy the expected norms of dress (see Bonfante, 2009: 115). Both of these types are unusual in their construction, as C_Type_47 has an inexplicable addition, the rags, and C_Type_20 a glaring omission, the exposed chest (see Fig. 5.13). The distinctiveness, difference, and strangeness in clothing and adornment type signify the adornment of liminal boundaries, delineate those on the precipice of such boundaries, and illustrate the segregation of life and death. This is in contrast to C_Type_23, C_Type_54, and C_Type_64, which are the other types of this tree branch that follow expected constructional patterns of painted dress as defined per this studies dress typology (see Fig. 5.14 & appendix C). The *other* content type associations of these groupings, such as false door, journey to the underworld, rocks, altar, and Charun, also place an emphasis on the strange, otherworldly and mythological boundaries suggested by C_Type_20 and C_Type_47 (see Leighton, 2004: 165; and Harvey, 2008: 49-70).

Fig. 5.13: C_Type_20 and C_Type_47.

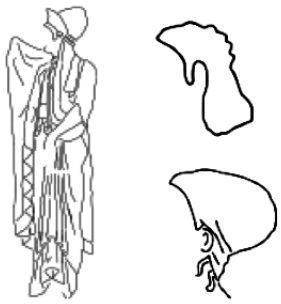


Fig. 5.14: C_Type_23, C_Type_64, and C_Type_54.

The ability of painted dress to non-verbally communicate is significantly enhanced by the consistent arrangement of expectation defying types. For example, Group 2c.i most precisely identifies the female demon Vanth (see Fig. 5.15). This demon, purportedly dressed as a 'winged huntress', acts as a guide to the dead, albeit allegedly not taking much part in the activities of the scenes in which she occurs (Scheffer, 1991: 58). Instead, she supposedly stands quietly in a corner, sometimes taking a step forward, holding or often brandishing a torch or sword, or sitting on stone, boulders, or altars (Scheffer, 1991: 58). Apparently, all such demons are passive, and at

most point and gesticulate, brandishing swords and threatening with their torches in a general way, but not entering actively into the action, and most often they do not indicate by even gesture their state of mind, or any kind of active participation (Scheffer, 1991: 58). Furthermore, it is supposed that only when engaged in conducting a person or persons in scenes of parting and/or meeting and travelling do the demons take a more active role, although even in these scenes they are ascribed passivity and usually keep in the background (Scheffer, 1991: 61). But, they do occasionally guide a person on his or her way by placing an arm around a shoulder, or by putting out a hand for support (Scheffer, 1991: 61). The attire of this 'winged huntress' is described as a short chiton or tunic, very often leaving the breasts exposed, supplemented by soft, laced boots with floppy and ragged tops. Between the naked breasts, there are usually cross-bands (see Fig. 5.15). The demon may also wear a long, straight dress, be barefoot, and have wings either in the hair or on the back (Scheffer, 1991: 56). However, considering the distinct, consistent, and impactful dress composition presented by Group 2c.i it is clear that Vanth is *present* in more than just a 'vague fashion' (see Scheffer, 1991).

Fig. 5.15: Vanth (Steingraber, 2006: 270-71).

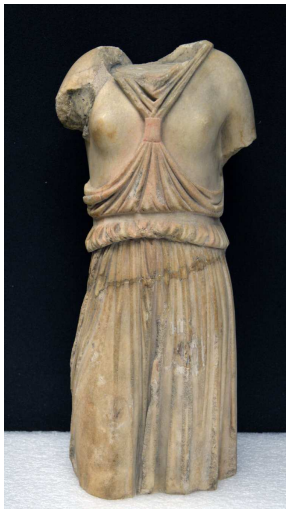


Fig. 5.16: Artemis (The British Museum [Online]).

Far from being 'remarkably passive' or a 'silent witness' (see Jannot, 2005: 63) the composition identified by Group 2c.i is suggestive of an *active* character whose presence, if 'invisible to participants in the scene', continually communes with and impacts the 'viewers from the outside' (see Scheffer, 1991: 60 & 62). The construction and way of wearing of C_Type_20 in particular, by exposing the breasts, contradicts Etruscan expectations and societal norms concerning nudity (Bonfante, 1978: 14). Nudity was adopted in art, as an artistic motif, but not in daily life, yet even as an artistic motif, nudity was not adopted completely (Bonfante, 1978: 14). From this perspective the exposed breasts and semi-nudity facilitated by C_Type_20 actively impacts the

viewer. This type of dress is different, strange, disconcerting, and contrary to the clothing and adornment types' of this studies typology, and thus deviates from normal Tarquinian painted dress. It highlights Vanth as an element of the unknown, something unusual and otherworldly. Her painted dress is outside of the conventional Tarquinian code, and so is a more evocative and recognizable form of non-verbal communication. Such a violation or deviation from the code of dress is a profound act, and this absence of conformity is meaningful (Lee, 2015: 24). It marks a statement that communicates the liminal boundary between life and death, the precarious part of the road between the world of the living and the tomb (Scheffer, 1991: 63). Vanth's dress is a prominent and almost textual marker that actively and distinctively communicates a perspective toward death and burial driven by other worldly sepulchral concerns (see Tilley, 1991: 18). The demon's dress is significant by virtue of this active involvement with death. Vanth's activity is accentuated by the contrast of C_Type_20 with the mundane C_Type_64 and C_Type_47. Therefore, Vanth is a being of disconcerting and unexpected 'fright' but not pity' (see Scheffer, 1991: 62), and also a being of activity, participation, and distinction, whom adorns an important sartorially defined boundary. She is not present on the *whim* of the artist (Scheffer, 1991: 62), but is instead a precise sartorial set piece manifesting a narrower perspective toward death and burial.

Vanth's dress is not the attire of a 'huntress' (see Scheffer, 1991: 56). The composition identified by Group 2c.i marks Vanth as an *active* signifier. However, it does not denote a 'huntress' when examined from the clothing and adornment types' physical construction, form, and properties (see Veblen, 2007; Summers, 2001; and Sorensen, 1997). When considering the affect of such distinct clothing and adornment types, and their relationship to Vanth's body, they become significantly less active or capable, and more inactive and impractical. The exposed breasts and rolled chiton of C_Type_20, the rags of C_Type_47, and the long hair of C_Type_64 are not practical attire for a huntress. C_Type_20 provides neither support nor protection from the elements. C_Type_47 presents substantial tripping hazards, and the long hair of C_Type_64 can be easily caught, tangled, or trapped, or even prove a distraction or irritant. The short skirt and shod boots are not, as has been previously suggested, overly convenient for moving quickly through a terrain full of pitfalls (see Jannot, 2005: 63). The labelling of Vanth's attire as that of a huntress stems from shared sartorial similarities with Artemis, amongst other demons and deities (Bonfante, 1983: 210; also Scheffer, 1991: 53; see Fig. 5.16). Despite Vanth possessing neither quiver nor bow the label for her painted dress has stuck. The dress composition presented by Group 2c.i is not that of a huntress, as Vanth is not dressed like a huntress; Vanth is dressed as an Etruscan demon. There is undoubtedly a Greek mythological inspiration behind Vanth's attire and portrayal, but it is necessary to provide an 'Etruscan answer' to this most often unchallenged Greek connection (Brandt, 2015: 153). The composition provided by Group 2c.i is an 'Etruscan answer' (Brandt, 2015: 153). It fulfils a distinctive signifying role within the visual

language of painted Tarquinian clothing and adornment types, the role of a boundary portent, and not the garb of a *huntress*.

The dichotomy is such that Vanth is both *active* and *inactive*. She is active according to her clothing and adornment types unusual typological distinctions that signify a boundary, and inactive according to these clothing and adornment types affect and bodily relationship. This dichotomy is reconciled by acknowledging the prioritization of sartorial signification. To the viewer Vanth fulfils an active sepulchral role, this is her message, and what she means, whilst for the wearer, this dress imposes the limitations of the garments' construction and way of wearing, impositions that must be managed or overcome, this is its affect. The active sartorial impact of Vanth's attire negates the inactive properties of her dress. As a liminal being Vanth is not bound to materiality. This female demon remains active in spite of her inappropriately worn and constructed dress. The signification invoked by Vanth's dress remains prominent, even though it restricts her activity. For a being such as Vanth the phenomenology of a composition is less important than 'what' this composition communicates. Vanth is demonstrably active through her dress, and not because of her dress. She is not passive and is not wearing the attire of a huntress. Although, it is difficult to ascertain the extent to which the sepulchral and uniquely Etruscan effect of Vanth's dress is consistent, and how far the reception of her dress was influenced by allusions to Greek mythology. There is nothing, other than the repeated contexts and associations, to suggest a fixed meaning or reception to this dress, as the social meanings of dress are not static (Lee, 2015: 25). Regardless, Vanth's dress is otherworldly, consistent, frequent, and distinct enough from this studies typology of painted Tarquinian dress to stress its narrower, precise, and deliberate manipulation.

C_Type_23 and C_Type_54 (Group 2b.i)[2] are associated with dead females, as well as Vanth, and both are congruent with the typical attire of Etruscan women who wore the *usual* belted chiton, or robe, over which they added a long mantle fastened at both shoulders with buttons or stitching' (Bonfante, 1978: 16). This *usual* attire has here been enriched to also include a hood and a diadem (see Fig. 5.17). Etruscan artist's typically depicted figures of real people wearing everyday dress, which contrast Vanth's distinct attire (see Fig. 5.18). The women wearing their rich attire are ostensibly dead and commencing their journey to the underworld in the escort of demons (see Fig. 5.24). Furthermore, Group 2c.ii is associated with flute player, juggler, acrobat, and javelin thrower, which are activities consistent with funerary celebration (Barker & Rasmussen, 2000: 245). This group includes C_Type_24, a sleeveless chiton, and C_Type_1, a short waist wrap (see Fig. 5.19). These two clothing and adornment types belong to those who serve, such as entertainers and cupbearers. They are basic, functionally simplistic, and not as rich or

[2] Group 2b.i has an associative strength of 0.86. Group 2b.ii has an associative strength of 0.89. Group 2c.ii has an associative strength of 0.98.

elaborately adorned as C_Type_23 and C_Type_54. C_Type_8, in contrast, is not a clothing and adornment type of those who serve, but of those who are served, of those mourning the deceased, or awaiting their arrival in the underworld (see Fig. 5.20). The casual draped to the waistline nature of C_Type_8 implies inactivity and luxury, thus worn by those partaking in a banquet (Rathje, 2013: 827). Therefore, the mourners, the dead, the demon, the entertainers, and the ancestors, are evident by their painted dress. They are the characters adorning the liminal boundary, and demonstrate its demarcating clothing and adornment types. This is reflective of the inherent oppositions of dress that are used to establish a contrast between the distinct, the prestigious, and the mundane, a contrast of painted dress that prioritizes more precise and specific sartorial communication.

Group 2b.i, Group 2b.ii, and Group 2c.ii persistently dress death and loss. The 510 BC *Tomb of the Baron* and 500 BC *Tomb of the Cardarelli* illustrate this clothed liminal boundary through C_Type_23, as the women depicted wearing this garment in these tombs are deceased (Brandt, 2015: 150; see Fig. 5.22). Similarly, in the 5th century BC *Tomb of the Leopards*, *Funerary Bed*, *Whipping*, *Cardarelli*, *Francesca Giustiniani*, *Black Sow*, *Cock*, and *Querciola*, a young boy is depicted wearing C_Type_1 while acting as an ancillary component to funerary celebrations (see Fig. 5.23). C_Type_24 can too be found, alongside demons, in the 250 BC *Tomb of the Cardinal* and 250 BC *Tartaglia*, also alongside funerary celebration in the *Tomb of the Lionesses* and the later *Biclinium*, *Shields*, *Tapestry*, and *Mercareccia* (see Fig. 5.24). C_Type_8 is connected to the 325 BC *Tomb of the Orcus II*, with its demons and deities, and it also adorns the banqueters (ancestral?) in the 400 BC *Tomb of the Biclimium* (see Fig. 5.26), and C_Type_74 is depicted in the 250 BC *Tomb of the Garlands* adorning a demon (Charun?; see Fig. 5.25 & 5.21). Through these clothing and adornment types, presented across the 6th – 3rd centuries BC, three funerary spaces are observable (see Brandt, 2015: 150). For example, C_Type_1 adorns a living boy, C_Type_74 a liminal demon, and C_Type_23 a dead woman. This division of dress supports the assertion of a long-standing liminal space, and space of the dead, existing in the Etruscan mind-set by the end of the 6th century BC (Brandt, 2015: 150). It acknowledges that Tarquinian tomb painters were from an early date making prioritized sartorial choices, which were initially broadly tailored to ambiguously commemorate death and burial, but later altered to be more selective, and to narrowly characterize death.

Fig. 5.17: C_Type_23 and C_Type_54 – the hood and the diadem – the dress of the dead female.

Fig. 5.18: C_Type_20, C_Type_64 and C_Type_47 – the dress of Vanth.

Fig. 5.19: C_Type_1 and C_Type_24 – the dress of the entertainers.

Fig. 5.20: C_Type_8 - the dress of the mourners or ancestors.

Fig. 5.21: C_Type_74 - the hairstyle of a demon (Charun?).

Tree Branch 2 resituates the understanding of 4th – 3rd/2nd century BC painted Etruscan dress. It emphasizes that painted dress 'lies at the margins of the body marking the boundary between self and other, individual and society' (Entwistle, 2000: 327), but also that it characterizes the liminal boundary between this world and the next, between the living and the dead, the real and the mythological. It clarifies not just that dress communicates social information to others, but also the importance of these messages as understood by their wearer (Entwistle, 2000: 325). Dress is the means by which the body becomes a self, which in the context of tomb paintings is driven by experience, or a lack thereof, with the given types of clothing and adornment on display, and their recognized place, or lack thereof, within the *code* of dress (Lee, 2015: 27). Individuals dress with an 'implicit understanding of the rules and norms of particular social spaces' and their experience of their bodies in time and space gives them their sense of self (Merleau-Ponty, 1995). As an embodied practice, dress is essential to perceiving and understanding the world; experience of dress determines place and space (Entwistle, 2000: 333). This place is an acknowledgement of boundaries, be it rich or poor, man or woman, dead or alive. This place is more or less static and fixed sartorially in an immovable fashion. This is a place that becomes apparent, and relatable (or not), when dress is so frequently and consistently depicted amidst Tarquinian tomb painting. Therefore, Vanth's painted dress in particular enables viewers to situate themselves within the painted amalgam of death and burial and to recognize a stranger more precise characterization and emphasis toward death.

Fig. 5.22: The two deceased women (see Steingraber, 1986: 285 & 297) wearing C_Type_23 in the *Tomb of the Baron* (left) and the *Cardarelli Tomb* (right).

Fig. 5.23: The young boys wearing C_Type_1 besides a funerary banquet in the *Tomb of the Leopards* (Steingraber, 2006: 146-147).

Fig. 5.24: C_Type_24 worn alongside demons (left) in the *Tomb of the Cardinal* (Steingraber, 1986: 298). It is too worn amidst the farewell/greeting scene (below) in *Tomb 5636* (Ridgway, 2000: 307).

Fig. 5.25: C_Type_74 hairstyle adorning a demon (Charun?; Steingraber, 1986: 303).

Fig. 5.26: C_Type_8 worn at a funerary banquet in the *Tomb of the Biclimium* (Steingraber, 1986: 288).

The perception and understanding of dress derives from the bodily and social experience of dress. It is experience that affords recognition (or not) of boundaries such as societal worth and position, bodily restriction and limitation, difference, and most crucially, the boundary between

life and death. Hence, the viewer's experience of dressing (or of not dressing) means the demon cannot become the deceased, the deceased cannot become the living, and the entertainers cannot become the luxurious mourners or awaiting ancestors. These transformations transgress the available and expected sartorial vocabularies, and contradict existing societal structures (see Leighton, 2004: 167). Yet, the living can become the dead, and this boundary can be crossed regardless of fixed experiential structures of dress. Therefore, Tree Branch 2's compositions codify this transition; they mix known dress, accentuated by the unknown and strange dress, to prompt recognition of this crossable boundary, an inevitable and distinctly adorned liminal boundary. The dress of this tree branch populates the roles, characters, and processes presented at this liminal boundary. Furthermore, deviation from such roles, characters, processes, and ideologies becomes more significant. For example, Vanth's attire occasionally conforms to the expected code of Tarquinian dress (see Fig. 5.34). Ironically, this unexpected normality is as useful as the expected irregularity. It demonstrates an altered sartorial vocabulary so as to articulate something different from the expected norm. Thereby, it interrupts as well as facilitates the non-verbal conversation enabled by dress at the liminal boundary of death characterized by Tree Branch 2[3]. Group 3c.i despite a slightly lower associative strength of 0.97 more adequately facilitates this societal wide conversation by maintaining its type's grouped cohesion across 12 depictions, which is greater than Group 2c.i's frequency of 5. This suggests a more determined and potentially more widely applicable sartorial articulation.

5.4 – Populating a Liminal Boundary through Strongly Associated (and more Frequent) Painted Dress Part. 2: Charun

Group 3b.i, Group 3c.i, Group 3c.ii, and Group 3c.iii (Tree Branch 3) are suggestive of the different forms of dress attributable to Charun, the Etruscan male demon of death (see Stoddart, 2009: 47 & see Fig. 5.27 – Fig. 5.32). They have a weaker associative strength of 0.97, but a frequency of 12. Thereby, Charun possesses a more extensive sartorial vocabulary in contrast to his counterpart Vanth. He is frequently represented with a hooked nose, short beard, ruffled hair, bestial ears, sometimes with wings, while carrying a hammer, or occasionally a sword, and also, albeit infrequently, handling serpents (Stoddart, 2009: 47). He is also shown with pale cream, blue, or greyish skin, pointed ears, snake hair, large tusks, heavy brow ridges, large lips, fiery eyes, a black beard, and an ugly frightening face (Simon, 2006: 57). Furthermore, he wears a short chiton or tunic, like that worn by artisans or household slaves, sometimes with no sleeves, or an exomis, and soft-laced ragged boots, similar to those worn by Vanth (Jannot, 2005: 65). Charun's versatile and varied dress is attested throughout the painted clothing and adornment typology from the 410 BC *Tomb of the Blue Demons* to the 250 BC *Tomb of the Anina Family* (see Table. 12). The groupings of Tree Branch 3 identify a cornucopia of strongly associated

[3] Furthermore, it highlights the need to refine the clustering analysis so as to make it a sensitive enough tool to accurately detect the different ways of wearing the same types of dress.

clothing and adornment type compositions that dress Charun. The significance of these groupings emanate from their diversity and impact on conceptions of character, role, reception, and their more precise visual rhetoric toward death and burial.

The varieties of compositions presented by Tree Branch 3 through the 5th – 3rd/2nd centuries BC identify the changing painted dress and roles for Charun. The 5th century BC arranges a composition of C_Type_19, C_Type_68, and C_Type_78 (see Fig. 5.27) – worn without C_Type_46, the laced ragged boots. This century also sees Charun wearing C_Type_26 (see Fig. 5.28) and C_Type_28 (see Fig. 5.29), both with the C_Type_71 hairstyle (see Fig. 5.28 & Fig. 5.29). The 4th century BC sees the omission of C_Type_26, the exomis, but the continued wearing of C_Type_28, and the composition of C_Type_19, C_Type_78, and C_Type_72 (see Fig. 5.30). Intriguingly, this century also combines C_Type_73 and C_Type_79 (see Fig. 5.31). The 3rd century BC presents each composition of Tree Branch 3 with the exception of C_Type_73 and C_Type_79 (see Fig. 5.32). The diversity and variety of this dress supports *Charun* as a label for many different creatures. Charun is not a single figure but a plurality in the later periods (see Krauskopf, 2006: 81), however, the varied compositions of dress identified by Tree Branch 3 suggests that Charun was also perceived and dressed as one of many beings from the earliest period onwards[4]. A Charun by his attire and accoutrements could be either the ferryman with the oar, the guide with the torch, or the gatekeeper with the mallet (Jannot, 1993: 60-61). The sartorial variety for this demon (and its comparatively weaker associative strength) points to a creature, rather than a particular deity or demon, depicted using different attributes to characterize his different roles. Charun were potentially depicted and dressed as separate creatures so as to compensate for the limitations of their Greek progenitor Charon when used in an Etruscan context (see Krauskopf, 2006: 81). The epithets found in the *Tomb of the Charuns* divide the demon Charun into various beings, each of which probably had particular functions within their Etruscan context (see Krauskopf, 2006: 82)[5]. Furthermore, several variously dressed Charun are depicted simultaneously in the *Tomb of the Blue Demons* (see Fig. 5.33).

Fig. 5.27: C_Type_19 (chiton), C_Type_78 (beard), and C_Type_68 (hairstyle).

Fig. 5.28: C_Type_26 (exomis) & C-Type _71 (hairstyle).

[4] It was not clear whether Charun was originally one or many beings (Krauskopf, 2006: 81).

[5] This differentiated representation of the various Charun types, identified by name, is unique (Krauskopf, 2006: 67).

Fig. 5.29: C_Type_28 (chiton) & C_Type_71 (hairstyle).

Fig. 5.30: C_Type_19 (chiton), C_Type_78 (beard), and C_Type_72 (hairstyle).

Fig. 5.31: C_Type_73 (hairstyle) & C_Type_79 (beard).

Charun sartorially manifests guiding demonic powers (Krauskopf, 2006: 81). It is counter-productive to dwell on who is who when examining this distinct dress; it is not essential to discern what dresses the boatman, and what dresses the gatekeeper, but it is important to acknowledge the significance of painted dress in influencing narrower and more precise notions of character, role, and reception. This acknowledgement shifts study toward the changing perspectives of painted dress, and realization of its more precise utilization amidst death and burial (see Harlow et al, 2005: xii). The sizeable but repeated variety of strongly associated dress attributable to the representations of Charun attests to its delineation of their role. A Charun's dress identifies it as a facilitator in social ritual, as reinforcement of beliefs, customs, values, and as definers of social roles. Through such painted dress the Greek Charon is split into several creatures to fulfil the expanded roles and functions inherent within the 4th – 3rd/2nd century BC Etruscan funerary decorative scheme. These forms of dress signify their contexts, wearers, and roles. They are a distinct, and therefore precise, reinforcement of a variously arrayed semiotic repetition designed to provoke viewers into an expected response (Lee, 2015: 24).

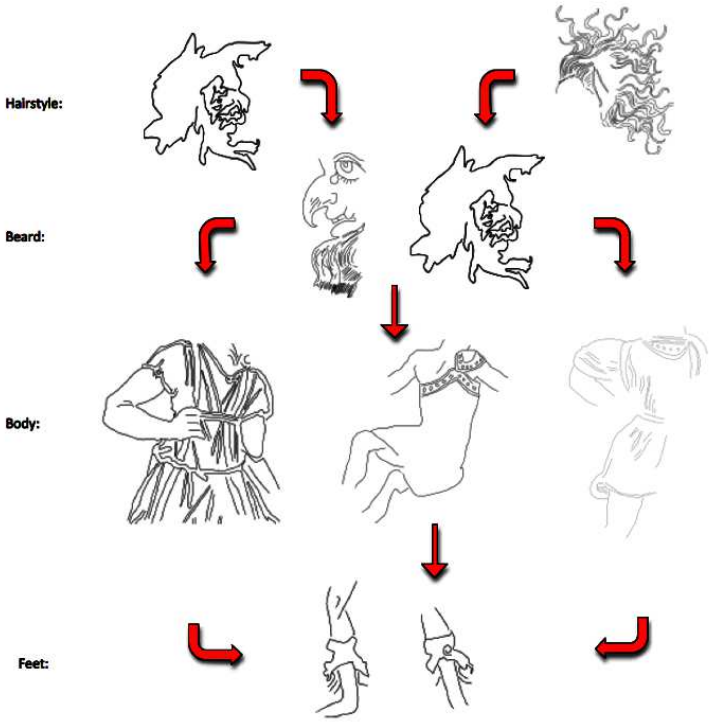


Fig. 5.32: 3rd Century BC compositions.

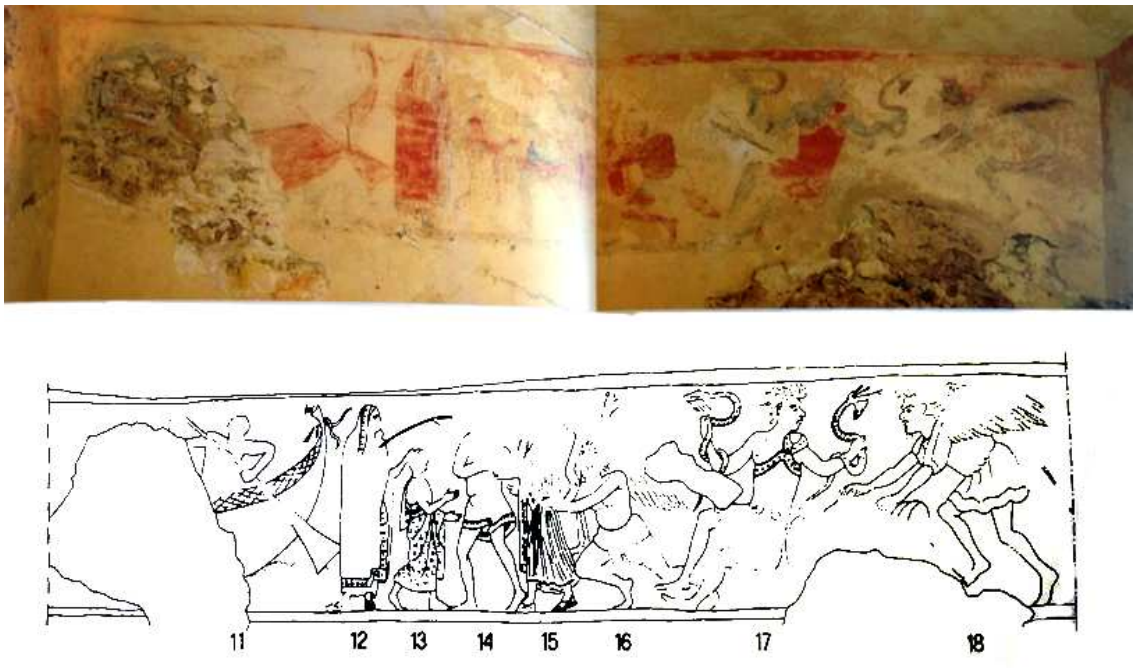


Fig. 5.33: *Tomb of the Blue Demons* (Steingraber, 2006: 163 – top; Jannot, 2005: 62 - bottom).

The chitons, the boots, or the exomis worn by Charun, although distinct, are not enough to prompt such a specific or unusual response, but the face and hairstyle of Charun are particularly eccentric and frightening. C_Type_72, C_Type_78, C_Type_68, C_Type_71, C_Type_73, and C_Type_79 are distinctive beards and hairstyles worn by Charun. C_Type_68 and C_Type_78 are bestial, ruffled, and unkempt. They are stark reminders of difference, of the demons association with the 'other' and death. C_Type_72 is snake-like hair similar to that sometimes worn by Vanth, which is reminiscent of mythological and underworld connotations (Simon, 2006: 61; also Terpening, 1985: 15). C_Type_71 and C_Type_73 are two more wild and unkempt hairstyles, and C_Type_79 is a distinctively short but unusually pronounced beard. The primary distinction of a Charun is the body modification around which the clothing wraps, as this presents a discomforting contrast between the mundane and the distinct. The strange hairstyles, the bizarre facial features, the pale skin colour, the wings, and the contorted facial expressions, contrast with the relatively mundane and normal dress types. Their jobs as gatekeeper, ferryman, and guide correspond with normal life, reflective more or less of their attire, but their supernatural destination, their role, and their origin, are worn over their face and body. This direct contrast with normality is a powerful and effective pattern of non-verbal communication. The typological code of Tarquinian dress is perverted on the representations of Charun to specifically communicate the boundary between life, death, and *otherness* (see Goffman, 1976: 70).

The variability but relative normality of a Charun's dress contrasts with the consistency and distinctiveness of Vanth's dress. The character Vanth, in contrast to Charun, possesses a formulaic

system of dress; a formula rarely deviated from within the tomb paintings of Tarquinia[6]. This consistency suggests a coherent message expressed by her dress and implies an expected usage amidst a particular context. To deviate from this consistency, as in the 250 BC *Tomb of the Anina Family*, no matter how minutely, is to alter the language of painted dress, it is to supplement types of dress, it is to communicate a modified message, and it is to move beyond the bounds of expected usage. To cover Vanth's bust (see Fig. 5.34), and to alter the physical construction, and way of wearing, C_Type_20, evokes a deliberate statement. Vanth's bust is covered, her breasts are no longer bared, and the level of nudity is now non-existent, and she is almost humanized. A level of prudery could be assumed had the same tomb presenting this depiction, the *Tomb of the Aninia Family*, not also presented Vanth bare breasted on the entrance wall (see Fig. 5.34). Thus, it can be inferred that prudery did not motive the deviation. The deviation was to be different, to assert a non-verbal cue. This cue is supported by the depiction of a Charun wearing an exomis that leaves the left shoulder free instead of the traditional practice of leaving the right shoulder free (see Fig. 5.34; Ridgway, 2000: 307). Similarly, the alteration to Vanth's garment, C_Type_20, covering her bust, can also be said to constitute such a reversal of her attire.

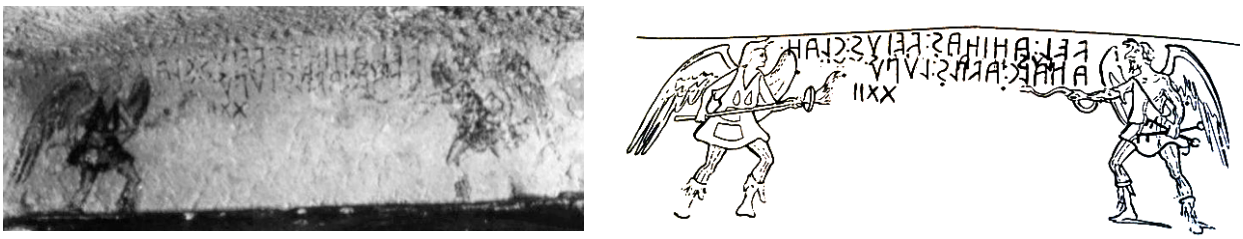


Fig. 5.34: *Tomb of the Anina Family* - Vanth (left) with covered bust (the sketch incorrectly depicts an exposed bust) and Charun (right) wearing an exomis that leaves the left shoulder free instead of the right shoulder, which is unusual dress for these demons (Ridgway, 2000: 308).

The reversal of painted dress reverses its intended message. A buttoned up suit jacket indicates a standing individual, but an unbuttoned suit jacket indicates a seated individual (otherwise the jacket would break). A loose tie indicates a casual, relaxed, potentially rebellious employee, while a straight and proper tie indicates a professional, reliable, and hardworking employee. A deerstalker hat with its earflaps tied under the chin indicates cold weather and high winds, while the earflaps tied together above the crown indicates warmer weather and slower winds. The hood of a coat worn over the head indicates it is raining, the hood left folded over the back of the coat indicates it is not raining. Therefore, the reversed attires of a Charun and Vanth act as intentional modifications of their character and message, rather than a whimsical accident of depiction. These demons are guides to the deceased in their *expected* garb, and so their depiction either

[6] Vanth's dress across different forms of material culture is consistent with the descriptions presented in this chapter (see Scheffer, 1991).

side of an epitaph above a sarcophagus in *reversed* garb suggests the opposite, as they are not yet guiding, but instead waiting. They are not yet guides because the deceased was not yet deceased. The epitaph is a name, a reservation of space and a living will proclaimed inside the family tomb. The reversed dress of the demons is an acknowledgement of this reservation and will, as well as an assurance for the individual that when deceased they will be interred and guided from their reserved location within the familial tomb. Sartorial reversal directs viewers toward the dress's deliberately constructed significance. Painted dress is utilized here as a form of value perspective, which manipulates Vanth's sartorial characterization, and permits corruptions to her narrative through the violation of her otherwise strongly associated and consistent painted dress. This is a violation no doubt driven by the *Tomb of the Anina's* use by only select (prestigious?) members of their family; it was never completely filled with burials (Roth, 2013: 192; also Nielsen, 2002: 89 – 126).

The consistency and distinctiveness of Vanth's painted Tarquinian dress, in contrast to the normalcy and variation of Charun's, suggests Vanth is representative of a singular demon rather than a collective of creatures. Vanth directs rather than assists the Charun, as she is the demon most precisely defined, and thus responsible for delivering and guiding the deceased. A Charun opens the door with a hammer, but it is Vanth who ushers the deceased toward the door, lights their passage with a torch[7], and unlocks the door with her key (see Jannot, 2005: 64). Despite the abnormal physical characteristics, beards, and hairstyles of a Charun, their normal attire is less impactful in comparison to the dress of Vanth. Furthermore, the otherwise congenial physical characteristics of Vanth, the wings and snake-like hair notwithstanding, serve to enhance and accentuate the power of her strange and distinctively worn attire. The dress of a Charun is the diametric opposite of Vanth as a Charun looks monstrous, but dresses almost normally, while Vanth dresses strangely, but looks more or less normal. It is through this opposition that Vanth's superior status is affirmed.

The use of dress as an identifying marker demarcates the contrast between reflecting passively to announcing actively (Miller, 2013: 18). A Charun's dress makes no attempt, other than the distinct beard and hairstyles, to confront the viewer, and it is left to the contrast between normalcy and the grotesque abnormal physical features of a Charun to communicate expectations to the viewer. However, Vanth's dress actively announces itself and engages through its different and distinct properties that contrast with her almost normal and congenial appearance. Thus, Vanth possesses stronger sepulchral power amidst a pictorial scheme prioritizing precise and specific sartorial communication. Precise non-verbal communication is also afforded by Group 9c.i, but its lower frequency is suggestive of a less wide ranging and more individually applicable

[7] A torch assumed just a badge of office (see Scheffer, 1991), but although Vanth's scenes are not dark in their depiction we can assume the actual liminal passageway will be dark and so this places Vanth in an even greater position of power as she literally lights the way for the deceased to progress on their journey.

sartorial articulation. Its 0.96 associative strength makes it the weakest 4th – 3rd/2nd century BC dress grouping, but it contains distinctive clothing and adornment types, which like Vanth and Charun actively affront societal sartorial expectations. Group 9c.i is statistically the least valuable 4th – 3rd/2nd century BC dress grouping, it is as infrequent as Group 1c.i but lacks Group 1c.i's 0.99 associative strength. However, Group 9c.i is valuable as an inference of innovative sartorial manipulation.

5.5 – Dressing the Liminal through Less Strongly Associated (and more Infrequent) Painted Dress: Pygmies, Demons, Gods, & the Underworld

Group 9c.i (Tree Branch 9) has a weaker associative strength of 0.96 and a lesser frequency of 1. It reflects the 4th – 3rd/2nd century BC trend of strong associative strength, but low frequency, amidst painted dress. Its clothing and adornment types exhibit the more precise sartorial narrative presented in the 350 BC *Tomb of the Pygmies* and the 325 BC *Tomb of the Orcus II*. The banqueting scene on the rear wall of the mid-4th century BC *Tomb of the Pygmies* is of a conventional nature, as is the supplementary file of walking figures on the right wall, and so too is the mounted procession, who appear to have veiled heads, on the entrance, and left walls (Steingraber, 1986: 331). However, the lively fight scene with pygmies and cranes above the left hand loculus is both unique in Etruscan tomb painting and non-conventional (Steingraber, 1986: 331). Similarly, the *Tomb of the Orcus II* is non-conventional in its funerary depictions (Steingraber, 1986: 331). It is here, much like the *Francois Tomb* in Vulci, where the gods and heroes of Greek myth are depicted mingling in Hades with Etruscan demons, and members of the tomb's family (Steingraber, 1986: 331). Amongst the depictions are red-winged snake haired demons, and Cerberus, Geryoneus, Phersipnai, Aita, Sisyphos with his rock, Herakles, Tuchukha, Thanatos, Hypnos, Odysseus, Achilles, Agamemnon, Teiresias, and Ajax (Steingraber, 1986: 331). A conventional banquet was likely represented in the centre of the former right wall of this tomb, albeit it was also probably set amidst the other worldly context (Steingraber, 1986: 331). The painted funerary dress in the *Tomb of the Pygmies* and *Tomb of the Orcus II* represents the sartorial shift (from the 6th – 5th century BC) toward more precisely characterizing death and burial.

Tree Branch 9 straddles the transitory iconographical repertoire between the 5th and 4th century BC by sartorially delineating a distinct versus a mundane boundary. C_Type_59 and C_Type_57 stand out as most distinct amongst the clothing and adornment types of Tree Branch 9. They are unlike their associated C_Type_31, C_Type_33, C_Type_50, C_Type_75, and C_Type_62, as they diverge from commonplace funerary dress. C_Type_59 and C_Type_57 are not commonplace painted dress for musicians, dancers, racers, boxers, gladiators, warriors, or banqueters. Such blatantly strange types of dress replace the subtle delineations between death and burial, as seen in earlier 6th – 5th century BC painted dress (see Brandt, 2015: 150). For example, the 510 BC *Tomb of the Baron's* large kylix, young flute player, woman, and accompanying horsemen,

which subtlety balance burial and death, have yielded to C_Type_59 (see Fig. 5.38) and C_Type_57 (see Fig. 5.39), which are constitutive of a sartorial strategy prioritizing dress's precise depicted arrangement to characterize death.

C_Type_59 adorns the short statured Pygmies. This type departs from a Pygmies normal pastoral and peasant arming (Harari, 2004: 166). Their weapons are usually those used by farmers to protect crops from birds, including cranes (Beazley, 1951: 37). Such Pygmies are shown wielding spears, swords, and round shields, alongside foreign arms and clothing, such as bows, peltae, and pointed Scythian hats, in black-figured and red-figured funerary vase painting; some of which, such as the 570 BC *Francois Vase*, have been found in Etruscan funerary contexts (Mazurek, 2013: 8; see Fig. 5.35). Tellingly, it was not until 350 BC that this iconography was depicted within Tarquinian tomb painting. This suggests, much like their more precise and specific sartorial narrative, that there was a significant shift in tomb painting's strategy of non-verbal information exchange (see Wobst, 1977). This shift codifies death, which in the *Tomb of the Pygmies* uses C_Type_59 as a key piece of sartorial contextualization. Through C_Type_59 geranomachy is adapted and enhanced to extend beyond the context of burial and vase painting, and to signify death.

Fig. 5.35: The *Francois Vase* found in an Etruscan Tomb in the Necropolis of *Fonte Rotella* near Chiusi. Geranomachy is visible on the vase's foot (Harari, 2004: 170).

Fig. 5.38: C_Type_59.

Fig. 5.39: C_Type_57.

The equipment of heroic weapons in the Tarquinian *Tomb of the Pygmies*, such as the light cavalrymen aspides and the bronze C_Type_59 helmet, look vaguely Attic, but intend to recall earlier Italic types (Harari, 2004: 177). Similarly, C_Type_57 the wolf (or dog) skin cap adorns Aita the Etruscan Hades (see Jannot, 2005: 66) or Calu, another chthonic divinity who was offered statuettes of dogs, and also received dogs as sacrificial offerings (see Jannot, 2005: 70). The wearer of

C_Type_57 appropriates qualities of man and wolf (or dog - see Jannot, 2005: 70). The wolf (or dog) skin cap acts as a symbolical or mythical substitute for a beast or monster who emerges from the world below to seize the dead (Thanr?; Jannot, 2005: 70 & 154). Thus, it is the diminutive scale and chronologically displaced constructional properties of C_Type_59 that prompts recognition of a distinctive sartorial boundary. Furthermore, it is too the unusual constructional properties, and also the mythological connotations of C_Type_57, that provokes another liminal boundary distinction amidst an otherwise imprecise, and mundane grouping of clothing and adornment types.

The geranomachy of the *Tomb of the Pygmies* is placed between the arriving procession of riders and the tall red burial calyx-krater immediately before the 'Elysian wall' (Harari, 2004: 174). Thus, the strange Pygmies are seen as inhabitants of a rocky no-man's land dividing the dead from their relatives (Harari, 2004: 187; also Roncalli, 1990; & Torelli, 1997). The battling Pygmies and cranes are viewed as part of the same symbolic space that is assigned to sphinxes, chimera, hippocampi and lions in earlier painted tombs (Harari, 2004: 178). This is a space in which the metaphysical geographic features of such beasts encourages acceptance of the ultimate removal of the dead person from their family (Harari, 2004: 178). Therefore, pygmies are different and distant from the dead and the living (Harari, 2004: 187). They are liminal creatures that live on the bank of the 'Ocean', a river at the borders of the worlds end (Harari, 2004: 165; also Cristofani, 1997: 185). Their liminal quality, ungovernable nature and aggression, which characterize the four pairs and trio of Pygmy dualists depicted in the *Tomb of the Pygmies*, is supported by their painted dress. The marginal limbo implied by these creatures is brought in part through the strangeness and difference of C_Type_59. The small scale of this type is one of its most striking aspects, and such size immediately marks the helmet as unsuitable for wear or use by an adult. Additionally, it is unlikely that so diminutive a helmet was crafted (context and intended use?), much less used, unless it were for children. Thus, an immediate boundary of disbelief is established. A boundary fuelled by its older Italic styling, whose accepted significance had undoubtedly transformed over time, as such significance depends on assumptions rooted in experience, expectation, emotional reaction, and the surrounding world (Bonfante, 2009: 115). Therefore, it is conceivable that C_Type_59, as a piece heritage, gradually transformed, at least in part, into a signifier of liminality and youth.

The early Italic rather than Attic design of C_Type_59 suggests an intentional Etruscan adaptation of geranomachy in the *Tomb of the Pygmies*. The small scale of both C_Type_59 and the Pygmies lends corroboration to the concept that this Etruscan adaptation is a subtle homage to the heroic stage of a mythical adult age, never reached because of a child's immature death (Harari, 2004: 185)[8]. The C_Type_59 helmet and weaponry of a Pygmy fit a child, and according to

[8] This is much like Volterran kraters or stamnoi with *putti*, Pygmies, or other kinds of dwarfs.

Aristotle 'all children are dwarfs' (Harari, 2004: 185)[9]. Pygmies personifying a deceased child is not entirely absurd given that they are entertaining, visually different, and cartoonish to the point of immaturity (one is mounted on a red she-goat). The diminutive and appropriately scaled dress and equipment emphasizes this immaturity, as do their achondroplasic limbs (see Fig. 5.36). They wield weaponry, wear armour, and fight a courageously heroic and masculine battle, which could, but like the snuffed out potential of a deceased child, does not exist in the world of the living. It is akin to toy weaponry, armour, and equipment, which only served to supplement or foster a child's imaginary ideal of their future prestige, glory, and honour in grand battles or adventure. The big burial calyx-krater depicted immediately before the 'Elysian wall' just on the loculus (see Fig. 5.36) supports this position as such kraters were used as cinerary urns exclusively for male children or youths (Harari, 2004: 185)[10]. Pygmies and their dress were used to relax the tension, and to temporally remove the horror of young death through entertaining immaturity and the very specific sartorial heroization of the fledging deceased (see Harari, 2004: 187). Herein is also a suggestion of the possible association of pygmies and cranes with children due to the suitability of the 'comic' and entertaining nature of the scene and its accompanying story.

Fig. 5.36: The Pygmies doing battle with the cranes in the *Tomb of the Pygmy* (left wall). To the right is the large burial calyx-krater (cinerary urn for male youth?). The youth on the left-most wall of the loculus is only slightly visible as are the several figures and red trees(?) with green leaves (Steingraber, 2006: 161).

Fig. 5.37: C_Type_57 atop *Aita/Culu* next to *Geryoneus* and *Phersipnai* in the Underworld. *Phersipnai's* snake like-hair and *Geryoneus's* many faces and absurdly sized shield compliment the surreal and fantastical nature of C_Type_57 (Steingraber, 2006: 199).

C_Type_57 is a type markedly different from other headwear amidst the Tarquinian painted dress code, and as such it is disconcerting to the point of fright. Its difference from the typological norm of painted Tarquinian dress, and its prominent bodily placement, highlights it as a

[9] Reference from Harari, 2004 = *CVA*, *France* 20, pl. 33, 6; Dasen, *Dwarfs in Ancient Egypt*, G. 14. Cf. Arist. *Mem.* 453b.

[10] On the left wall within the loculus (burial niche) positioned directly beneath the battle scene a wreathed youth can be distinguished and on the back wall of the niche several figures and small red trees(?) with green leaves can also be seen (Steingraber, 1986: 331). Are the figures the youth's ancestors relaxing amongst the trees of the Elysian Fields (Krauskopf, 2006: 82)? Ancestors who the youth has joined in the Afterlife?

meaningful signifier. The wearer possesses the qualities of a man and a wolf (or dog). Therefore, the wearer is transformed into a chimeric monster, a monster that aptly illustrates its infernal background. This dressing of what has been deemed an 'unknowable' Etruscan Afterlife (Jannot, 2005: 68) endeavours to codify a funerary space predisposed more toward death than burial. C_Type_57 is outlandish, surreal, and different, which are qualities that too characterize the Underworld when compared to the pragmatism and mundaneness of life. The distinctive choices of dress, and the decisions made to produce Aita's/Calu's composition of dress, necessitated a definition of their infernal space and place. As such the strange C_Type_57 reflects a fundamental change as it illustrates the painted sartorial progression from broadly dressing burial and its activities, to specifically dressing death and its proclivities. This sartorial change communicates an adjustment to the artistic direction of funerary painting, an adjustment more concerned with articulating, and more precisely defining, the previously undefined and largely ignored space and place of death - the Underworld (see Jannot, 2005: 68).

C_Type_57 is rooted in Greek culture, but adorns Etruscan derivative Aita/Calu (see Fig. 5.37). Accordingly, the Afterlife shown in the *Tomb of the Orcus II* comes directly from Greek literature and not from Etruscan concepts (Jannot, 2005: 67). Yet, the names and the demon figures of the tomb remain wholly Etruscan (Jannot, 2005: 67). The artist has created an imaginary world (Jannot, 2005: 67). An imaginary world where Etruscan heroes encounter those of the literature that served as their model (Jannot, 2005: 67). However, although through such imagery a claim is made to prestigious Greek ancestry, or a political opposition to the Romans asserted, it is more nuanced than such explanations would otherwise suggest (see Jannot, 2005: 68). The iconographical funerary direction of the *Tomb of the Orcus II* and *Tomb of the Pygmies* has been altered to thematically bend toward the Greek, as demonstrated by C_Type_57, and to a lesser extent C_Type_59[11]. Yet, both pieces of dress point towards Etruscan alterations that ensure the Underworld is a recognizable place by mixing both local and Greek inspiration (Leighton, 2004: 163). This mix resulted from their broader, ambiguous, and less precise dress failing to adequately address the cultural uncertainties arising from tumultuous events, such as the capture and destruction of Veii, several Gaul incursions, the loss of Etruria Padana, Syracusan plundering, military skirmishes with an increasingly powerful Rome, and urban social unrest (Steingraber, 2006: 185). The dialectic of dress changed by necessity (see Kaiser et al, 1991) to accommodate an aristocracy concerned with stability and continuity at a time of rapidly changing fortunes and shifting balances of power (Leighton, 2004: 167). The need to characterize their death was greater than the need to commemorate their burial (see Leighton, 2004: 167).

C_Type_57 and C_Type_59 indicate the development of funerary depiction that articulates a visible priority for more precisely codifying death. They place an emphasis on how and who

[11] C_Type_31 is suggestive of a horse rider's dress (means of otherworldly transport – see Scheffer, 1991: 60).

might get to the Underworld successfully, and also what it might be like, and who might populate this infernal place. Thus, rather than asserting that the 'Etruscan Underworld is unknowable', it is more accurate to state that an Etruscan pictorial dressing of the Underworld was developing (see Jannot, 2005: 68)[12]. C_Type_57 and C_Type_59 compliment the haggard tramp like figure of a Charun with their hooked noses, blue skin, scruffy tunic, and the short-skirt wearing, breast bearing, and winged Vanth, as well as the ass-eared, bird-beaked Tuchulcha (Leighton, 2004: 165). Such specific and characterizing sartorial depiction is a change from the inability of prior painted modes of dress (6th – 5th century BC) to reconcile their broader ambiguities between death and burial. Modes of dress are reflective of their time, but they are a mirror and not the original; they are used and discarded just as words are, because they meet (or met) needs and express (or expressed) ideas and emotions (Laver, 1969: 22). Garments reflect what we are or want to be at a given moment and those garments that do not align with this refelction disappear from our sartorial vocabulary (Laver, 1969: 22). They no longer reflect the needs, ideas, or emotions of the original. Thus, Group 9c.i identifies an attempt at a more rigid, precise, and evidently most needed sartorial characterization of death and its spaces and places so as to more definitively construct its narrative.

Group 11a (Tree Branch 11) too presents re-considerations of space and place. The mixed attire of Tree Branch 11 and its myriad of 'other' content type associations, and combination of 'active and inactive' properties, are indicative of a particular context. Dress must fit with the requirements of its backdrop, as context is key (see Fig. 5.40; Lee, 2015: 24)[13]. It is key as the 'meanings' generated by combinations of dress shift according to this context, and also over time (Lee, 2015: 24). For example, Group 9b.ii and C_Type_57, and Group 9c.i and C_Type_59, are significant because their properties imply a hitherto unseen context within Tarquinian tomb painting. They provide a signpost for a changed and unusual context. Through the context of place, properties, and space, the role of dress is expanded to encompass, amongst other things, gender, personal and group identity, ethnicity, power, and sexuality. Through such considerations C_Type_2 dresses a banqueter, C_Type_87 a hetaira, C_Type_32 a lyre player, C_Type_16 a jumper and athlete, C_Type_53 a chariot racer/warrior, and nudity a wrestler. Group 11a pieces together the place but separate spaces of death and burial, according to expectations of dress, and their corresponding context (see Bonfante, 2009: 115). Thus, the inclusion and use of clothing and adornment types such as C_Type_57 and C_Type_59 are more than just establishing a relationship with Greek mythological forebears, so as to underline an elevated social position (see Steingraber, 1986: 330). They are instead an attempt to organize and precisely realize liminal

[12] Although, Brandt suggests that depictions of the Etruscan Afterlife may have been either taboo (or connected to ominous outcomes) or that they did not have a firm visually Etruscan idea of the liminal space and Underworld (Brandt, 2015: 153). The taboo supposedly evaporated under the weight of Greek influence in the second part of the 5th century BC giving way to the popularity of Underworld scenes from the 4th century BC onwards (Brandt, 2015: 153).

[13] That is unless it is trying to make another statement of intentionally or accidentally not fitting in.

Etruscan places and spaces by dressing pygmies, demons, gods, and the Underworld, so as to construct and characterize the boundary between life and death (see Castor, 2016: 284).

Fig. 5.40: The man refuses to sunbathe, as he does not wish to attract any attention or look strange (Lurie, 1981: 155). Yet, his dress is stubbornly maintained in the wrong circumstance and is thus erratic and strange, as it does not fit with the context (Lurie, 1981: 155). It is this relationship between context and dress that serves as an important and useful analytical tool (Lurie, 1981: 155).

5.6 – Conclusion

This chapter demonstrates the 4th – 3rd/2nd century BC trend of low frequency, but strong associative strength amidst painted dress. The statistically identified groupings of painted dress – the tree branches - present the painted arrangements of dress, and their narrower and more precise manipulation of body, space, place, boundaries, value perspective, and narrative. They recognize the utilization of a stricter Tarquinian painted-dress code, which thrives on particular contrasts and oppositions to orchestrate a more structured and rigid system of non-verbal communication. They emphasize the narrower 4th – 3rd/2nd century BC processes of sartorial manipulation, which span from a strong 0.96 associative strength to a stronger 0.99 associative strength. They too have a similarly limited frequency from 1 to 12. This consistency of illustration identifies the narrowly precise utilization of 4th – 3rd/2nd century BC painted dress. The 4th – 3rd/2nd century BC sartorial strategy of information exchange (see Wobst, 1977) is more defined, less malleable, and possesses a specificity of perspective toward death and burial.

Group 1c.i (Tree Branch 1) communicates the insecure nature of the Pinie family through their reluctance to adorn a body. The family manifests doubts, about themselves, their past, and their future, but yet they behave, perform, and sartorially display as successful militaristic aristocrats. Group 2c.i (Tree Branch 2) presents the *active* participation of Vanth and her lack of a huntresses' dress. Vanth is situated outside of the societal painted dress typology, and threatens the established social order via a distinctive portrayal as a potent signifier of death (see De Marinis, 1966: 1089). Group 3c.i (Tree Branch 3) illustrates Charun as a creature rather than a singular demon, and expands the role of Vanth beyond that of an assistant; the Charun are subordinate to Vanth and wear 'normal' dress, but appear disfigured and monstrous, yet, generally behave in

the congenial manner implied by their dress. Tree Branch 3 too highlights the significance of alterations to patterns of painted dress, alongside a more structured formality toward death and burial (see Leighton, 2004: 167). Group 9c.i (Tree Branch 9) communicates the changed 4th – 3rd/2nd century BC sartorial perspective, which prioritizes a more stringent characterization of death at the expense of burial. Furthermore, Group 11a (Tree Branch 11) demonstrates how the properties of clothing and adornment types, and their 'other' content type associations, are manipulated to influence perceptions of death and burial. This priority of 4th – 3rd/2nd century BC painted dress specificity of illustration represents a codification of the liminal moments, characters, spaces, and places previously ill defined amidst 6th – 5th century BC painted dress.

The more rigid structure of painted dress from the 4th – 3rd/2nd century BC is exemplified by its abandonment of sartorial ambiguity. A demonstrably more specific precision is wrought through the utilization of painted dress. For example, the pygmies, Vanth, Charun, and other mythological components, alongside a more sartorially pronounced banqueting femininity and deified masculinity (see Leighton, 2004: 167; also Camporeale, 2009: 236), and the absent familial warrior, contrast the generally broader 6th – 5th century BC utilization of painted dress. Tomb painting through the 4th – 3rd/2nd century BC leverages painted dress to identify components of death, which were hitherto embedded amongst ambiguous depictions of burial. They too utilize painted dress to more fastidiously demarcate burial, such as the 150 BC *Tomb of the Meeting* funeral procession, which depicts mourners, the deceased, four lictors, and a victor solemnly wearing white togas (Steingraber, 1986: 301)[14], which contrasts the earlier more colourful, jubilant, lively, and ambiguous funerary processions i.e. 480 BC *Tomb of the Leopards*. Therefore, 4th – 3rd/2nd century BC groupings of dress draw from a more limited repertoire of visual imagery and language, akin to modern genre tropes (see Leighton, 2004: 111), or 'costumes' (see Eicher & Roach-Higgins, 1992: 1), rather than the broader visual repertoire utilized by 6th – 5th century BC groupings of dress. This reflects the more formal, structured, formulaic, and character orientated deployment of 4th – 3rd/2nd century BC painted dress. Gone is much of the ambiguity fostered by earlier representations of painted dress, which focused less on characterization, and more on commemoration. The structurally narrower and focused 4th – 3rd/2nd century BC painted dress facilitates the articulate definition and population of deliberately tailored liminal spaces, places, moments, and characters. There was no concession to sartorial ambiguity that might upset these processes of funerary characterization.

[14] Similar processions are also seen in the contemporaneous *Bruschi Tomb* and *Tomb of the* Typhon.

6. Conclusion

This thesis started from the idea that dress is the most communicative aspect of material culture (Cleland, Davies & Llewellyn-Jones, 2007: viii). Therefore, the research on which this study is based is significant because it exploits the versatility of dress, and enhances its mode of investigative utilization in the ancient world. This thesis more clearly illustrates how ancient dress can relate to structures of thought, unacknowledged conditions, habits or experiences, and unintended consequences of social life (Tilley, 2006: 4). How dress can navigate relationships within society, value systems, cosmologies, beliefs and emotions, as well as personal and social identities (Tilley, 2006: 4). Moreover, the study demonstrates how ancient dress can connect to history and tradition, individual and collective memories, social stasis, social change, and to spaces, places, and localities (Tilley, 2006: 4). How dress can encourage examination of its relationship to the human body, and how it recognizes the body as a cultural and sensuous thing, which may move, present and display in various ways (Tilley, 2006: 4); and how dress can constrain, extend or limit bodily capacities (Schiffer, 1999: 30-50). Furthermore, this thesis innovatively identifies the quantifiable and inter-connected quality of painted Tarquinian dress, which facilitates identification of painted tombs' sartorial structures through the use of a hierarchical clustering analysis. The innovative methodological utilisation of painted dress provides access to a fundamental mode of non-verbal communication (see Tilley, 2006: 7), and thereby innovatively expands the maligned and unimaginative study of Etruscan dress, and the conceptually limited analysis of painted Tarquinian tombs. The application of this study's methodology enhances existing processes of examining dress in the ancient world by producing a reconsideration of how such examination can be supplemented by contemporary dress theory, and statistical mechanisms, to more effectively relate to the deliberate non-verbally communicative structures, ideas and intentions of painted dress (see Tilley, 2006: 4).

The special significance of Tarquinian tomb paintings is the arrangement of its dress, which as this study has illustrated possesses characteristically recognizable, coherent, and significant organizational groupings that constitute an intentional form of non-verbal communication. Pivotally, hierarchical clustering analysis identifies this hitherto ignored communicative potential amidst these key representations by visualizing exactly how painted dress was utilized as a means and mode of non-verbal communication. The analysis innovatively recognizes painted dress as deliberate non-verbal communication and thus classifies tomb painting as a communicative device. This re-positioning of tomb painting as a communicative medium re-tailors prior examinations of its symbolic linkages and metaphors, which fruitlessly searched for intrinsic homology by applying more subjective forms of visual analysis (see Leighton, 2004: 120). Prior painted tomb examination neglected the structuring, structured rules, and generative principles afforded by painted dress, and failed to exploit the interaction between dress, language, and tomb paint-

ing. The quantifiably identified groupings of painted dress help to untangle social, political, and economic relationships, which simultaneously develop understanding of Etruscan dress and wider Etruscan society. Crucially, the methodology identifies dress groupings that diachronically illustrate the (hitherto unrealised) 6th – 5th and 4th – 3rd/2nd century BC manipulations of painted dress and their differing non-verbal priorities. The groupings further appreciation of painted dress's cultural importance and identify a nuanced organization of the structures and functions of painted Tarquinian dress (see Harlow et al, 2005: xii). Repeatable processes of numerical validation statistically verify this innovative identification, which supports identification of painted dress as the key communicative mechanism of Tarquinian tomb painting. Moreover, the insight afforded by hierarchically clustering painted dress is suggestive of the benefits in similarly *dressing* other mediums of visual representation depicting dress.

This final chapter discusses the studies' two key outputs, which both contain new knowledge that changes the view of the Etruscan use of painted Tarquinian dress, and painted Tarquinian tombs. Firstly, the chapter examines the studies' identification of painted Tarquinian dress as a form of non-verbal communication that conveys hitherto overlooked socio-cultural information, secondly it examines the implications wrought from the significance of identifying so clearly demarcated structured groupings of painted dress. The significant and hitherto unrealised socio-cultural attachments to the groupings of painted dress are too clearly articulated by this chapter. The communication of death, burial, and boundaries by painted dress, as well as dressed bodies, and social, political, and economic status, are explored within their differing 6th – 5th and 4th – 3rd/2nd century BC chronological contexts. Furthermore, this chapter acknowledges the implications of tomb painting's re-positioning as a communicative device in tackling long-standing questions concerning their use, perception, viewership, and funerary context. Tomb paintings' differing 6th – 5th and 4th – 3rd/2nd century BC sartorial groupings are examined to answer previously irresolvable questions regarding their ritual role, public accessibility, and private viewership, target audience, commemoration/celebration, and characterization. Finally, the chapter assesses the methodologies' success in identifying dress as the structural principle by which tomb painting was ordered, and the studies' impact on developing more innovative utilizations of ancient dress, and furthering understanding of Etruscan dress and wider Etruscan society. The structure of this chapter situates dress (particularly painted dress) as an important mode of investigating the ancient world, which necessitates innovative methodological adaptation to best exploit it as a resource.

6.1 - Communicative Device

Identification of painted Tarquinian structures of dress innovatively attests that painted dress was the key mean and mode of non-verbal communication. The pictorial forms of painted

dress constitute a language, which was intentionally manipulated and wielded to create recognizable and coherent organizational groupings. These groupings demonstrate what types and combinations of painted dress were significant (see Gosden, 2001: 166). They present the painted 'assemblages used to modify and/or supplement' bodily depiction (see Eicher & Roach-Higgins, 1992: 1). Painted dress's statistically identifiable communicative structure emphasizes its primacy amidst visual representation. The structured relationships between painted depictions of dress are identified as critical for manipulating expression, and as a means to arrange pictorial signification. Painted dress was used as a deliberate form of non-verbal communication, a determination which necessitated this studies' quantitative methodological approach so as to address questions of context and meaning neglected by more traditional and descriptive 'visual analyses' (see Lee, 2015: 15-16). Painted dress is the 'common denominator' (searched for by Brandt, 2015: 110) binding together Tarquinian tomb painting. However, the discrepancy identified between 6th – 5th and 4th – 3rd/2nd century BC painted dress illustrates its hitherto unrealised varied deployment. The high frequency, but weak associative strength of the latter's dress groupings, contrasts the low frequency, but strong associative strength of the former's dress groupings. This is indicative of hitherto ignored and consciously manipulative arrangements of painted dress, whose sartorial intentionality provides a means to more robustly tackle the ever-present 'problems of interpretation' (see Barker & Rasmussen, 2000: 244) when attempting to reconcile the ambiguities of funerary art. The combinations and compositions of painted dress uniquely identified by this study - or lack thereof - indicate Tarquinian tastes, desires, identities, and cultural changes amidst canvases ostensibly preoccupied with death and burial (see Leighton, 2004: 119).

The previously unidentified and overlooked contrast between 6th – 5th and 4th – 3rd/2nd century BC utilizations of painted dress cannot be attributed to their skewed quantity of painted tombs. Yes, the 57 painted tombs from the 6th – 5th century BC ensure its greater quantity of painted dress when compared to the 33 painted tombs from the 4th – 3rd/2nd century BC. However, it is the deliberate arrangement and typological variety of painted dress that signifies its forms of expression. Therefore, the decreased frequency of 4th – 3rd/2nd century BC painted dress is of secondary significance to its more strongly associated and typologically irregular groupings. Similarly, the increased frequency of 6th – 5th century BC painted dress is too of secondary significance to its weakly associated and typologically regular groupings. The 4th – 3rd/2nd century BC utilization of painted dress to non-verbally communicate modifies the 6th – 5th century BC utilization, but the former's lower frequency is an effect rather than a cause of this modification. Later periods are identified as more consistent in their wielding of sartorial precision at the expense of earlier mechanisms of sartorial communication, as the earlier mechanisms deployed broader typological groupings and so leant away from, rather than prioritized, non-verbal specificity.

6.1.1 - Communicating Death, Burial, and Boundaries

The 6th – 5th and 4th – 3rd/2nd century BC segregates burial and death through their innovatively identified differing manipulation of painted dress. Tree Branch 2, Tree Branch 3, and Tree Branch 9 demonstrate a 4th – 3rd/2nd century BC codification of death, but they offer few allusions to the processes of burial. Conversely, Tree Branch 4, Tree Branch 5, and Tree Branch 10 illustrate a 6th – 5th century BC propensity to dress processes of burial, but they offer only ambiguous commentary toward death. This difference connects to the ability of painted dress to manipulatively signal identification with particular values, and to transform the body and its surroundings (see Schneider, 2006: 203). The myriad of 6th – 5th century BC 'aristocratic diversions' (Barker & Rasmussen, 2000: 244), be it hunting, sports, athletics, dancing, music, or banqueting, depict a plethora of painted dress arrangements, which reflect this earlier painted dress's weaker associative strength and higher frequency. More than providing 'a pictorial record of life' or 'documentation of burial rites' (see Barker & Rasmussen, 2000: 245) it is the lack of sartorial specificity amidst these depictions that is most significant. There are no 6th – 5th century BC rigid groupings of painted dress structuring perception towards death. Phersu (Group 10b.i) eponymously typifies this absence by his 'mask' (Jannot, 1993: 311) inhabiting a space somewhere between a 'proto-Charun' and a 'masked man' (Croon, 1955: 16). Albeit, Group 10b.i is visually entrenched amidst depictions of burying the dead, as such its structure is unlike Tree Branch 2, 3, and 9, as its rigidity and unusual typology is not immediately associable with death, but rather processes of burial. The later 4th – 3rd/2nd century BC tree branches eschew such ambiguous and indirect portrayals of burial to construct more direct personifications of death. Abandonment of sartorial imprecision so as to more precisely non-verbally articulate death and malign burial is a most significant cultural change (see Strauss & Lynch, 2007: 12) – and a valuable insight afforded by this studies' unique methodology.

Painted dress communicates shifting cultural mores and changing responses as it is connected to the past, present, and future (see Simmel, 2003: 238). It visibly and immediately indicates societal change (see Strauss & Lynch, 2007: 12). Hence, sartorially codifying death, and sartorially neglecting burial, represents a significant reorientation of painted tomb perspective and utilization. Later 4th – 3rd/2nd century BC painted dress illustrates concern for the future as it assuages death through a narrower articulation of previously undefined spaces, places, and characters. Gone is the eclectic 6th – 5th century BC mix of past and present situated alongside an ambiguously defined future. Gone are Tree Branch 10's, 7's, and 6's evocation of the present, and Tree Branch 4's and 5's reminiscences. Gone are the lively, but often ambiguous, pictorial commemorations of burial. Instead, Tree Branch 2, 3, and 9 are conspicuous signifiers of sartorial arrangements realizing a future by using their distinct and unusual groupings to fix meaning (see Schneider, 2006: 205). They use painted dress as a continuing and relatable link (see Darish,

1989; or Feeley-Harnik, 1989), which fabricates a tangible and structured reality to reconcile the 6th – 5th century BC existential ambiguity surrounding death and the afterlife. Delineating and deepening relationships amidst death 4th – 3rd/2nd century BC painted dress is identified as establishing the context waiting in a future predisposed to culminate amongst the dead. This later dress fixes the processes of death, rather than the processes of burial. Their sartorial codification materializes death and makes the afterlife *real* (see Sofaer, 2007: 3). Shared understanding of the past and present, as articulated through 6th – 5th century BC painted dress, was in the 4th – 3rd/2nd century BC second to dressing a previously 'unknowable' (Jannot, 2005: 68) afterlife. The multi-dimensional nature of painted dress (see Schneider, 2006: 203) is innovatively identified as being exploited to rectify this unknown, and to empower societally contracted and structured boundaries.

Tree Branch 2, 3, and 9, and also Tree Branch 5 and 10, erect a boundary between life, burial, and death. They dress otherworldly demonic shepherds of the dead, diminutive pygmies riding she-goats and tussling with cranes, a living husband joining his dead wife, and a deceased's persona. Painted dress is here identified as manipulated to connect with the immaterial world, which is beyond the physical (as in Schneider, 2006: 204; also Weiner, 1985; '89; & '92). These groupings comprise of type *selections* defying socially constructed means of sartorially attributing identity, and they work together to produce what was 'unknowably' immaterial (see Jannot, 2005: 68). Typologically, the groupings ignore societal norms informing the behavioural expectations that condition sartorial interaction (see Eicher & Roach-Higgins, 1992: 5). They challenge established social, political, and economic sartorial boundaries. For example, the living man wearing jewellery, the female demon baring her naked breasts, the male demon's inexplicable sartorial banality, and the pygmies' childish armaments, distorts the dialectical relationship between painted dress and societal expectation (see Goffman, 1976: 70). Their signals intentionally contrast the learned *program* of sartorial communication (see Stone, 1965: 220) to provoke recognizable *otherness*.

Tree Branch 1, 4, 6, 7, and 8 emphasize this *otherness* by exhibiting conformity to expected societal norms of non-verbal sartorial communication. Their signals are predicated upon experiential societal boundaries. For example, Tree Branch 7 and 1 stipulate societal status; Tree Branch 4 and 6 are suggestive of profession, and Tree Branch 8 of gender, sex, and conspicuous consumption. Notwithstanding their *otherness* Tree Branch 5 and 10 also communicate expected boundaries of burial, ritual, marriage, and family. More so than later 4th – 3rd/2nd century BC painted dress the 6th – 5th century BC groupings directly testify to perceptions of the Etruscan world and its inhabitants (see Bonfante, 1993: 47). Connection to such material boundaries, but also to immaterial boundaries, evokes the two-sided quality of painted dress (see Clark & Pau-

licelli, 2009: 3), which permits its articulation of otherwise obscured painted Tarquinian predispositions linked to taste, desire, identity, and cultural change.

6.1.2 - Communicating Societal and Individually Dressed Bodies

Painted dress is a key form of non-verbal communication not just because it articulates sociocultural, political, and economic qualities, but also because this study (for the first time in this context) acknowledges the construction and projection of certain types of bodies by painted Tarquinian dress (see Kaiser, 1990; or Summers, 2001: 12). Tree Branch 8 strategically employs painted dress to unequivocally portray a 4th – 3rd/2nd century BC female body, and to project an altered 'elite' familial femininity. This female body and femininity are accentuated by painted dress, and such exaggeration leaves no doubt as to their re-presentation so as to appear unmistakably and appropriately feminine. Tree Branch 8 transforms femininity by realigning sartorial attributes alongside bodily position to more prominently signify repudiation of gender equivalency. Comparatively, its feminine emphasis is rivalled only by the 6th – 5th century BC Tree Branch 5, which too sartorially emphasizes gender, but also its equivalency through bodily position. Gendered differentiation was not sartorially explicit until the 4th – 3rd/2nd century BC replacement of reclining and androgynous women with sitting and noticeably feminine women. Masculinity is also identified as becoming more of a sartorial and bodily priority in the 4th – 3rd/2nd century BC, which underscores painted dress's conditioning – or lack thereof - of gendered bodies (see Roberts, 1977: 560).

The formal properties of painted dress create deliberately conditioned bodily responses in their wearers, such as gender, which simultaneously project this response to viewers (see Sofaer, 2007: 4). For example, the restrictive and constricting dress worn by Tree Branch 6's juggling girl create and apply these attributes to her performance, thereby stressing its challenge and her skill. Furthermore, Tree Branch 4 prompts recognition of the unlikely idyllic places and spaces depicted for scantily clad funerary activity, and Tree Branch 7's bodily consideration identifies sartorial hierarchy between the *active* and the *inactive*. Bereft of a body, Tree Branch 1 nevertheless highlights the importance of recognizing the dressed body as both subject in, and object of, dress practice (see Hansen, 2004: 369). Tree Branch 1's bodily absence facilitates sartorial deception, but also emphasizes the capacity of painted dress to connect to an individual and also to their wider familial or societal collective (see Tilley, 2006: 4).

Lacking a body Tree Branch 1 removes the ability of painted dress to depict constraint, extension, or limitation of bodily capacities (see Tilley, 2006: 4). Yet, this removal provides more transparent insight into the individual identities and collective concepts enabled by painted dress. Tree Branch 1's bodiless painted dress identifies the 4th – 3rd/2nd century BC propensity to accentuate collective or familial concepts, rather than individual identity. Tree Branch 1's lack of

a depicted body is related to the *Tomb of the Giglioli's* introduction of decorated sarcophagi, which removed the necessity to depict individuals in its over-arching wall painting schemata. The wall-space was instead utilized for general exhortations concerning family (see Roth, 2013). Therefore, Tree Branch 1 communicates a special familial significance, as it has not identified an embodied composition of dress, but an array of familial symbols (see Steingraber, 1986: 309). It demonstrates and newly identifies the hitherto unrealised capacity of painted dress as a means of presumptive socialisation and deceptive negotiation (see Lee, 2015: 4).

Tree Branch 8 re-frames the wider 4th – 3rd/2nd century BC societal perspective of 'elite' Velcha familial femininity, rather than merely identifying Velia Seithiti and Velia Velcha. However, Tree Branch 8's 6th – 5th century BC component simultaneously identifies painted dress as a synonym for familial success and stability, but also as a demonstration of individual *inactive* banqueters and their conspicuous consumption. Similarly, Tree Branch 10 continues the dichotomous 6th – 5th century BC relationship with dress's two-sided quality, as does Tree Branch 6, 4, and 5. These branches ambiguously navigate relationships between and within society, as well as value systems, cosmologies, beliefs and emotions, and personal and social identities (see Tilley, 2006: 4). Their diverse two-sided qualities emanate from the more frequent, broader, and less targeted 6th – 5th century BC utilization of painted dress identified by this study. Conversely, Tree Branch 2, 3, and 9's adherence to societal characterization marks them as 4th – 3rd/2nd century BC products concerned less with individuality, and more with collective consciousness. These branches do not preclude communicating individuality, but their narrower focus, and reduced ambiguity make individuality decidedly less prominent.

6.1.3 - Communicating Familial, Social, Political, and Economic Status

Asserting that Etruscan 'high status' women appeared 'elegantly', though not 'extravagantly', dressed and bejewelled, and thereby they can act as contrasting ethnic signifiers is of limited value (see de Grummond, 2014: 414). Etruscan women do wear jewellery more often than Etruscan men, and both wear more jewellery than their Greek counterparts, yet the majority of 'high status' Tarquinian women are not depicted as 'extravagantly' dressed, nor are they 'elegantly' dressed. Rather they are dressed simply, with occasional concessions to 'extravagance'. Therefore, given the problematic nature of ethnic identity amidst archaeological thought (see Jones, 1997; or Hall, 1997), it is more appropriate to shift examination onto the link between dress establishing an identity and a sense of belonging more widely, rather than indicating ethnicity (Izzet, 2007: 231; see Diaz-Andreu et al, 2005). 'Extravagantly' dressed Etruscan women do appear, albeit infrequently, amidst Tarquinian tomb painting, such as Tree Branch 5's richly robed, veiled, and jewelled woman wearing a double-wreathed tutulus, disk earrings, choker, and bracelets with animal head terminals. However, their infrequent 'extravagance' is evidence of an

artistic sartorial device utilised throughout 6th – 3rd/2nd century BC Tarquinian tomb painting to non-verbally communicate and accentuate aspects of 'elite' identity – be it status, achievement, familial connection or continuity, age, or gender - via depiction of an ability to command, consume, and display conspicuously consumptive arrangements of extravagant or distinctive dress.

Tree Branch 5's amber ram-head pendant wearing male also projects his 'elite' conspicuous consumption via his distinctive necklace. Tree Branch 8's horseshoe earring – embedded amongst unusually bejewelled 4th – 3rd/2nd BC sartorial arrangements – is too an indicator of 'elite' consumption, but also, through its limited depiction and adornment of relatives, is indicative of a need of the Velcha family to modify the depiction of 'elite' women in Tarquinian tomb painting (see Castor, 2010). Furthermore, Tree Branch 10's Phersu, Tree Branch 2's Vanth, and Tree Branch 3's Charun, are also sartorially composed according to the relational nature of identity construction, which is most strongly defined and created at the intersection of the cultural boundaries substantiated by these characters (Izzet, 2007: 231). Thus, it is distinct, unusual and infrequent painted dress that is identified as being more indicative of personal and intimate components of identity, rather than nebulous contrasts between the differing quantities of jewellery worn by Greek, Roman or Etruscan men and women solely indicating broader and unwieldy conceptions of ethnicity (see de Grummond, 2014: 414). The capabilities of painted dress are well positioned to non-verbally communicate the on-going, fluid, and multifaceted active processes of identity construction (see Gosden, 2004: 69), which go beyond fixed articulations of ethnic identity (see Terrenato, 1998).

Aside from minor stylistic non-verbal articulations we now know as a result of this study that the 6th – 5th and 4th – 3rd/2nd centuries BC do not deploy comparative arrangements of painted dress. They implement differing structures to suit differing communicative priorities. Thematically, the 6th – 5th century BC dresses burial, but avoids death. Its painted dress alludes to the *otherworldly*, but firmly entrenches its sartorial repertoire amongst recognizable and worldly social, political, and economic structures. Accordingly, the 6th – 5th century BC fully utilizes the dressed body to indicate activity, inactivity, hierarchy, profession, and individuality. It intentionally accentuates loss amidst the 460 BC *Tomb of the Funerary Bed* and 410 BC *Tomb of the Maiden* by playing against its bodily trend and dressing absent bodies, thereby amplifying the dressed body's perceived 6th – 5th century BC significance. Individuality at the expense of a rigid overarching sartorial narrative prevails, which manifests broader and uniquely varied communicative groupings of painted dress. They are not entirely thematically isolated, but the degree to which 6th – 5th century BC painted dress groupings thematically overlap is minimal when comparison to later 4th – 3rd/2nd century BC groupings. Conversely, the later period dresses death, but minimizes burial. Painted dress in the 4th – 3rd/2nd century BC entrenches its repertoire amongst the otherworldly, and thereby diminishes the visibility of worldly social, political, and economic

structures. Consequently, the dressed body's 4th – 3rd/2nd century BC role is weakened to more strongly emphasize an over-arching sartorial narrative. Lacking significant communicative variation 4th – 3rd/2nd century BC painted dress groupings thematically overlap more than earlier 6th – 5th century BC groupings in their use as precision modes of non-verbal communication. Painted dress is innovatively identified as having been differently utilized to communicate thematic changes in taste, desire, and identity, which implicate wider considerations that govern cultural change.

Painted dress is identified as having been used as the primary form of non-verbal communication throughout 6th – 5th and 4th – 3rd/2nd century BC Tarquinian tomb painting. Not only is 6th – 5th century BC painted dress more frequent and weakly associated, and 4th – 3rd/2nd century BC painted dress less frequent and strongly associated, but their thematic orientations emphasize differing priorities of non-verbal communication. Earlier 6th – 5th century BC painted dress, due to its imprecise ambiguity, is identified as more individually expressive, and lacks a definitive agenda. Later 4th – 3rd/2nd century BC painted dress, due to its precision, is identified as less individually expressive and more generic, but possesses a definitive agenda. Nevertheless, their sartorially communicating death and burial, social, economic, and political status, bodily experience, individuality, family, past, present, future, otherworldliness, and gender, amongst other idiosyncratic significations, persists to greater and lesser degrees throughout the 6th – 2nd centuries BC. The differing priorities attached to the identified non-verbal sartorial communicative structures amidst the 6th – 5th and 4th – 3rd/2nd centuries BC result in their significant degrees of thematic variation. Changing chronological emphases between thematic articulations, be it the 4th – 3rd/2nd century BC focus on death, or the 6th – 5th century BC focus on burial, imparts contextual non-verbal communication beyond their immediate signification. Yes, the arrangements of painted dress non-verbally communicate, but it is the novel identification of such structures that confirms tomb painting as a medium of communication. Therefore, identifying structures of painted dress according to quantifiable measures repositions understanding of tomb painting's wider context and its shifting value as a communicative tool.

6.2 - Broader Significance

Statistically identifying painted dress arrangements elucidates deliberately communicative devices, which provide insight into the hitherto inaccessible priorities governing tomb paintings' intent and motivation. Placing painted dress's utilization into its broader context is aided by the statistically determined sartorial differences between the 6th – 5th and 4th – 3rd/2nd centuries BC, which can be used to measure painted intent and to gauge paintings' motivation. For example, the 6th – 5th century BC weakly associated and more frequent painted dress groupings indicate a less structured and formalized non-verbal sartorial communication. There is no critical priority to sartorially communicate beyond the creative expressions of artist and patron. Therefore, their

intent is not motivated by a need to conform to thematically codified structures, but rather to orchestrate recognizable yet individual structures of sartorial expression. Conversely, the strongly associated and less frequent 4th – 3rd/2nd century BC painted dress groupings indicate a more structured and formalized non-verbal sartorial communication. They demonstrate a priority to conform to thematically codified structures, and to communicate specific components of taste, desire, and identity. Strongly associated, but infrequent painted dress groupings imply explicitly specific non-verbal communication because they represent consciously repeated patterns of signification. Weakly associated, but frequent 6th – 5th century BC painted dress groupings rarely illustrate such consciously repeated sartorially signifying patterns. Instead, they rely on loosely arranged sartorial structures to prompt more individualistic and ambiguous signification. This statistically determined 6th – 5th and 4th – 3rd/2nd century BC sartorial difference is unique and valuable because it permits response to previously unanswerable questions concerning tomb paintings' use, perception, viewership, and context.

Tomb painting was not a crucial 6th – 5th century BC burial rite. Sartorially, its dress lacks the prerequisite structured consistency to accommodate ritual, which necessitates dynamic repetition to organize, measure, and control viewer perception (see Gane, 2004). Lacking a strong and tangible sartorial thread it cannot subscribe to the thematic connections specified by ritualistic behaviour (see Gane, 2004: 35). Thus, 6th – 5th century BC painted dress's frequency and weak association, namely its variety and expressiveness, does not speak to sartorial arrangements motivated by ritualistic intention. Albeit, the act of painting a tomb was likely a 'ritual' for those so inclined, but the organization of such paintings was not governed by the strict sartorial structures that would indicate more broadly applicable ritual significance. However, tomb painting was a key 4th – 3rd/2nd century BC burial rite. This period's stronger and infrequent, namely consistent and specific, painted dress groupings suggest articulation of a codified non-verbal communication. Sartorially, the narrower, more precise, and less ambiguous 4th – 3rd/2nd century BC painted dress structures accommodates ritual, which strives to effectively communicate its particular significance. Painting tombs changed from depicting loose and myriad arrangements of dress, without an overriding communicative priority, to drawing dress types dependably grouped together with a shared overriding communicative priority. Ritualized arrangements explain this newly directed sartorial deliberateness as the medium transmits organisational structures to align with developing patron and audience expectation. Tomb painting evidently came to demand more specific sartorial imagery to correspond with the structured processes required by ritual.

Tomb painting is also more a question of audience than a question of public or private. They are seen and it is to overlook their communicative nuance to ask if they are public or private (see Leighton, 2004: 116). Both eventualities sartorially manipulate their audience via painted expression. Privately, this expression might communicate personal or familial significance, but

publicly its reliance upon decipherable modes of dress would ensure it remains generally comprehensible even to a wider audience. Therefore, both eventualities require a manipulated non-verbal communication, which implies a targeted audience that is receptive, by varying degrees, to tomb paintings' sartorial arrangements. Moreover, this non-verbal communication needs to be read, and so utilizing recognizable painted dress arrangements, alongside unique or distinct alterations, prompts audience realization of manipulative intent; albeit, simply recognizing manipulative intent does not equate to comprehending its communicative intention. Regardless of public or private, painted dress permits its audience to read and to make sense of tomb paintings' depictions, and to at the very least realize that such painting has been manipulated to non-verbally articulate its significance. Refocusing onto audience, rather than public or private, more fully develops, more so than prior studies, why tombs are painted, and also to who and why they present the relationships that they do. For example, codified 4th – 3rd/2nd century BC painted dress groupings must by their communicative priority be the *correct* way to dress a tomb; otherwise their strongly associated compositions would very strangely fail to connect to their deliberately targeted audience.

Conversely, earlier 6th – 5th century BC painted dress groupings and their lack of communicative priority illustrate an uncertain audience, an audience yet to codify their expectations. They stipulate an audience that has no structured desires or tastes, which does not demand any sartorial precision. Audience is a target of communication, which 4th – 3rd/2nd century BC painted dress exerts itself to precisely accommodate, while 6th – 5th century BC painted dress's imprecision accommodates a more niche demographic. Thus, public or private is irrelevant, as the extent to which audience tastes and desires are targeted is the key question of importance, as it reveals underlying communicative motivation and purpose.

More precise 4th – 3rd/2nd century BC painted dress groupings conceivably targeted a regional or cross-cultural audience, as their statistically determined associative cohesiveness makes them most effective communicators and less susceptible to misinterpretation. Their specificity indicates arrangements that unmistakably communicate as they are tailored to a specification, which undoubtedly resonated amongst its targeted viewers without much risk of miscommunication. However, less precise 6th – 5th century BC painted dress groupings conceivably targeted a more local audience as they are less effective communicators and more susceptible to misinterpretation. Their frequency and ambiguity indicate arrangements not tailored to the generic codified specifications required to engage more culturally diverse audiences, but instead to idiosyncratic tastes and desires. Their depiction illustrates the higher degree of familiarity necessary from its audience to correctly untangle their nuanced sartorial complexity. This 'strategy of information exchange' (see Wobst, 1977) is less accessible as a marker that structures perception and facilitates societal interaction (see Howes, 1996: 2). Therefore, the communicative capacity of painted

dress cannot always be assumed to 'work' (see Douglas & Isherwood, 1979: 5). The language of dress was to be read by those who grasped its vocabulary (see Douglas & Isherwood, 1979: 5). Thus, the statistically identified relationship between the associative strength, frequency, and typology of painted dress determines its non-verbal accessibility, and thereby the scale and scope of its intended viewership (see Douglas & Isherwood, 1979: 5). Consistently repeated patterns of signification, as deployed throughout 4th – 3rd/2nd century BC painted dress groupings, suggest easily comprehensible and accessible painted sartorial structures, but the inconsistent 6th – 5th century BC structures suggests the opposite; they are inaccessible and only fully relatable to a local and contextually experienced audience.

Accordingly, 6th – 5th century BC painted dress commemorates, but 4th – 3rd/2nd century BC painted dress characterizes. Earlier 6th – 5th century BC depictions do not explicitly illustrate hopes or beliefs of the afterlife, but celebrate achievement and status. Later 4th – 3rd/2nd century BC illustrations do not explicitly depict status or achievement, but portray visions of the future. Thus, 6th – 5th century BC painted dress is identified as having been used to commemorate - be it Tree Branch 5's mournful man and wife watching from afar the funerary celebration amidst their 'sea girt estate' (see Steingraber, 1986: 193), Tree Branch 10's clinging to deceased persona's, Tree Branch 7's *inactive* banqueters, or Tree Branch 6's skilful performers. They do not 'record life' (see Leighton, 2004: 111; also Barker & Rasmussen, 2000: 245), but commemorate a life lived. This aligns with the idiosyncratic propensities of 6th – 5th century BC painted dress, which necessitate by their weakly associated groupings a more intimate relationship to fully comprehend. They are identified as making assumptions that can only be validated through closer familiarity with their dressed bodies, and they make no effort to accommodate unfamiliarity, which represents a previously unknown assessment of 6th – 5th century BC painted Tarquinian dress.

Lack of a 6th – 5th century BC accommodating non-verbal sartorial communication signifies a system of communication reliant upon assumed knowledge, which pertains to a commemorative structure disinterested in anything but its subject. Therefore, this earlier period's painted tomb commemoration is either intimate, or a brash allusion to egotism. Conversely, 4th – 3rd/2nd century BC painted dress characterizes death, but does not record a death (see Leighton, 2004: 111; also Barker & Rasmussen, 2000: 245). The 4th – 3rd/2nd century BC dress groupings characterise by utilizing strongly associated sartorial groupings as tools to descriptively signify. Their codified attributes, be it Tree 2's Vanth, Tree Branch 3's Charun, Tree Branch 9's pygmies, or Tree Branch 1's deceptive family, grapple with loss. These dress groupings create and sustain a sepulchral narrative, which manipulates thought and belief to characterise plausible components utilized to better portray the machinations of dying. This aligns with their accessible and relat-

able structure, which at its most basic level characterises a prevailing endurance, and broadcasts continuity.

Painted dress was used to communicate and not just to 'enhance the environment of a tomb' (see Barker & Rasmussen, 2000: 247). It conveys the structuring principles by which tomb painting was ordered, which this study has (for the first time) statistically identified (see Tilley, 2006: 8). Hence, painted dress's inter-connected system of non-verbal communication provides a quantifiably exploitable resource, which more accurately facilitates tomb paintings' analysis. The analysis innovatively identifies broader, ambiguous, yet more individual 6th – 5th century BC groupings of painted dress, and their local and more intimately familiar audience. It too identifies narrower, precise, yet more collectively societal 4th – 3rd/2nd century BC groupings of painted dress, and their inter-city or cross-cultural, and less intimately familiar audience. The partial utilization of painted dress by prior studies (see Bonfante, 2003; Brons, 2012; & Castor, 2010) overlooks such nuance in favour of more subjective piecemeal examinations, which pluck dress types from their typological system and place them outside of their intended structure. This selective and displaced utilization disregards painted dress's communicative capacity and weakens its validity by failing to engage it as a coherent system of non-verbal communication. Hierarchically clustering painted dress demonstrates that it is a coherent system of non-verbal communication, and that such systems cannot be ignored, but that such methodological innovations are required for their effective exploitation. Only by concentrating on the system of painted dress, on the sets of relations attached to its various forms, and its formal qualities, (see Gosden, 2001: 165; see Miller, 1998: 15), can it be effectively examined. Hierarchical clustering is necessitated to identify painted dress's inter-connected and structured system of non-verbal communication according to its own structured forms, and merits. Statistically identifying groupings of painted dress not only highlights their significance, but also the haphazard disparate subjectivity amongst preceding visual analyses. Previous analyses lacked cohesive commonality, structural equivalency, and a coherent, objective, and logically inter-connecting thread.

6.2.1 - Methodological Suitability

The hypothesized pictorial forms, language, and structures of painted Tarquinian dress are successfully identified and investigated by this study. The studies' hierarchically clustered dendrograms present 'an assemblage of modifications of the body and/or supplements to the body' (Eicher & Roach-Higgins, 1992: 1), and they are examined as 'a gestalt that includes the body, all direct modifications to the body itself, and all three-dimensional supplements added to it' (Eicher & Roach-Higgins, 1992: 1). The study transforms understanding of Tarquinia, its tombs, and its tomb paintings from the 6th – 3rd/2nd century BC by emphasizing the substantial and hitherto ignored communicative potential of painted dress. The thesis identifies and engages the

Tarquinian tomb painting dialectic of dress, which constitutes a structured non-verbally communicative system (see Strauss, 1983), within a specific context of culture and self (see Meskell, 2005: 1). The studies' perspective reconciles the structuralist totalities of painted dress as relational structures of meaning alongside an exploration of the perceived materiality of this dress (see Woodward, 2005: 21). Painted dress is linked to people and their development through artistic 'contextualization' (see Richardson, 2004: 6) of a kind not possible through *technical* textiles (see Tuckett, 2009: 141). This research engages conceptions of materiality alongside communicability (Hansen, 2004: 369) to avoid the 'fetishism of structural and semiotic approaches' (Keane, 2005: 183). Therefore, the forms of tomb paintings' dress are determined to possess recognizable structures that influence tomb paintings' affect, and also produce magical and aesthetic effects' (see Coote & Shelton, 1992: 9). The study expands the maligned examination of painted Etruscan dress, and the previously limited analysis of painted Tarquinian tombs, which did not thoroughly consider why or how painted dress was drawn or amidst what circumstances it was depicted (see Tuckett, 2009: 140).

Methodologically, the study is not without limitation. For example, it is difficult to ascertain when painted dress non-verbally communicates. Painted tombs are seen as they depict sartorially communicative devices, but when? Assumptions can be made concerning their owners' perception toward familial tomb longevity and continuity (see Leighton, 2004: 143-145), which suggests that distant ancestors were to see and read the paintings long after burial (see Nielsen, 2013: 180; or Nielsen, 2002). Thereby, it was assumed that the paintings non-verbal sartorial communication was to remain comprehensible, and that they are seen following a long-dormant burial's disturbance, re-visitation, or re-occupation (see Ciuccarelli, 2015). Conversely, it could be assumed that a sealed painted tomb was occasionally unsealed for visitation, ritual, or an additional burial (see Steingraber, 2016: 148). Therefore, its paintings are not only seen just prior to and during burial, but also intermittently across a longer span of time (see Izzet, 2007: 41). Moreover, it could be assumed that a painted tomb was a visible investment of wealth or taste, which openly displayed its paintings until its owners' burial – whereupon it was sealed away from view (Izzet, 2007: 41). Furthermore, some paintings are clearly created at different times for specific burials - to which they are spatially associated (Roth, 2013: 190). For example, the considerable difference in size between the two garlands depicted in the *Tomb of the Anina Family* potentially indicates their painting at different times (Roth, 2013: 201). Thus, painted dress could non-verbally communicate amidst a differing combination of eventualities, which changed over time, and from tomb to tomb. Yet, the method's designation of audience composition suggests 6th – 5th century BC paintings' local audience likely saw them more frequently, and 4th – 3rd/2nd century BC paintings' cross-cultural, inter-city, or regional audience likely saw them less frequently. However, it cannot claim to accuracy amidst such an unquantifiable variable, but only

allude to inference drawn from painted dress's changing grouped associative strength and frequency that indicate communicative capacity and intentionality.

6.2.2 - Developing Understanding

Statistical validation ratifies the methodologies successful identification of painted dress's structured groupings. For example, the tree branches cophenetic correlation averages to 0.5, which indicates that they reflect inherent patterns amongst the hierarchically clustered binary data-matrix (see Sneath & Sokal, 1973). Furthermore, different clustering algorithms and similarity measures consistently replicate Tree Branch 1 through to Tree Branch 11, which suggests that their structures are robust, accurate, and not generated due to a clustering procedures structurally imposing mechanisms (see Hammer & Harper, 2006: 74). Testing for an absence of cluster structure and rearranging the data-matrix also ratify the methodological integrity of the study. Therefore, the methodology is more than capable as a tool that develops understanding of painted Etruscan dress as an intentional form of non-verbal communication, and that simultaneously develops understanding of wider Etruscan society's means and modes of non-verbal communication. Thus, painted arrangements of dress are conclusively wilful non-verbal communications, which play with expression amidst canvases preoccupied with sartorial communication. Tomb paintings' non-verbal sartorial communication is manipulated to varying degrees from the 6th – 3rd/2nd century BC, which indicates consciously shifting choices and decisions as to its communicative utilization. Thereby, so too are painted tombs conclusively wilful non-verbal communicative devices, which host the hitherto unacknowledged non-verbal communicative system of dress. This is a system of dress indicating tomb paintings' indelible purpose as a means and mode of communication. Painted dress was utilized because it is and was recognized as a crucial component in shaping and communicating identity, facilitating audience interaction, negotiating differences, and creating as well as traversing sociological boundaries (see Colburn & Heyn, 2008: 6).

Critically, the key new knowledge found by this study is that during the 6th – 5th centuries BC painted dress tends towards typological regularity, high frequency, but weak associative strength, i.e. more variation in dress types, while during the subsequent 4th – 3rd/2nd century BC, the trends are towards typological irregularity, low frequency, but strong associative strength, suggesting a more concerted codification of painted dress. This key new knowledge, produced by the innovative application of a hierarchical clustering methodology, deepens the discourse about the uses of ancient dress as a coherent system of non-verbal communication. Why the manipulation of painted dress significantly changed from the 6th to 3rd/2nd century BC is difficult to explain, but what this thesis does is to try and identify what the changes are, and how they might be interpreted. Structural alterations of painted dress undoubtedly reflect on-going negotiations

amidst taste, desire, and identity, which articulate the fluctuating social, political, and economic circumstances that influence its utilization. However, the value of this research is its identification that tomb paintings and their representations of dress were deliberately communicative, and also its identification of key failings amidst prior stagnant qualitative processes of visually analysing Tarquinian painted tombs.

The statistical analysis quantifying representations of dress amidst a binary data-matrix enhances the utility of Tarquinian tomb painting, and transforms the view of the Etruscan uses of dress. It innovatively utilizes Tarquinian tomb painting to demonstrate the potential of quantitative visual analysis when applied to representations of dress, and its capabilities for adding significantly to knowledge of Etruscan dress, but also to ancient dress in general. This new approach changes the way in which painted Tarquinian dress is understood because it does not necessitate the traditional scaling compromises made between data size and data depth (see for example Holloway, 1965; Brandt, 2014; or Holloway, 1986; compared to Brandt, 2015). Therefore, this study does not have to choose between closely examining the painted dress of a single Tarquinian tomb (such as Petrarulo, 2012; or Ridgway, 2000), or more broadly examining the painted dress of a small grouping of tombs (such as Torelli, 1999; or Avramidou, 2009), or generally homogenizing the painted dress from a large grouping of tombs (such as Brandt, 2015). The methodology permits examination of both the macro and the micro dressed expressions and non-verbal conversations etched across the entire painted Tarquinian dataset. Thus, it is better able to investigate, represent, and interpret the complexity, diversity, variability, and uniqueness of Tarquinian tomb painting's non-verbally communicative sartorial systems. Traditional qualitative and anecdotal methods deployed to analyze such visual imagery and/or depictions of dress in the ancient world lack this scalability (see Elkins, 2011: 167). Therefore, they lacked the capability to acknowledge, identify and investigate the significant organizational structures amidst the overwhelmingly multifaceted Tarquinian tomb paintings. Particularly, prior methodologies failed to acknowledge the pictorial forms, language, and structures of painted Tarquinian dress, which this study has determined to possess recognizable, coherent and significant organizational groupings that constitute an intentional form of non-verbal communication (see Barthes, 1973: 27).

This research re-situates how pictorial representations of Etruscan dress should be examined. Methodologically, it presents a means to more effectively identify and display painted dress as a key mode of non-verbal communication by innovatively augmenting the scale and processes of its analysis. Most visualization tools show data as points, lines, or bars on a graph, but here the methodology innovatively visualizes painted Tarquinian dress types in their pictorial arrangements. Rather than dividing painted tombs' study into a number of discrete categories, such as genre, style, movements, chronology, subject, content, etc. (see Roth, 2013; or Scheffer, 1991),

the methodology utilizes painted dress to treat painted tombs as a continuous space, and thereby identifying and joining patterns between normally separated elements (see Manovich, 2011: 19). This is a space where painted tombs' differences are quantified into their hitherto unidentified structured arrangements of painted dress. Such quantitative visual analysis and visualization - instead of qualitative or anecdotal discussion – of painted dress permits a less assumptive, and more precise sartorial mapping of painted tombs according to their dressed typological 'qualities', so as to more accurately see what is actually there (see Manovich, 2011: 24). Furthermore, this quantitative visual analysis and visualization facilitate examination of painted dress as an organizational structure that has endemic communicative systems of form and reception by identifying new, and/or supplementing or modifying existing, sartorial classifications. Thereby, the ways in which Etruscan dress is understood and interpreted is changed as this form of analysis permits synchronic and diachronic investigation of dress in the absence of statistically significant finds of textiles.

Deploying complex statistical analyses alongside contemporary dress theory provides a novel framework that fundamentally alters investigation of Etruscan dress, as well as more general approaches to dress in the ancient world. Enhancement of traditional methodological inquiry into dress in antiquity aligns with the call to venture into 'newer areas of scholarship' (see Harlow & Nosch, 2014: 1), such as fashion studies and literary theory, to extract innovative cross- and inter-disciplinary interpretative frameworks. Yet, this study goes beyond even recent publications, such as Lee (2015) and Harlow & Nosch (2014), by more thoroughly engaging ancient dress as visual representation. For example, by assessing the strength and frequency of associations between different painted types of dress, and different painted scenes, the research more precisely explores how dress served as a form of communication in Etruscan society, and what statistically significant associations between types of dress, bodies/persons, scenes and components of scenes, might be communicating about their wearers. Rather than vaguely alluding to representations of dress as the best available evidence for examining how dress acted as a means and mode of visual communication in the ancient world (see Loven, 2014: 276 for example), the cluster analysis is able to identify specific groupings of dress, which are sartorial structures that prior qualitative and non-systematic approaches have failed to recognize or acknowledge. Through this identification not only are previously unknown structures of painted dress elucidated, but the statistically determined cohesiveness of these structures also re-contextualises Tarquinian tomb painting.

Newly identified trends toward typological regularity, high frequency, but weak associative strength, i.e. more variation in dress types, amidst earlier 6th – 5th century BC painted dress groupings indicate a lack of deliberate sartorial codification. Conversely, newly identified 4th – 3rd/2nd century BC painted dress trends towards typological irregularity, low frequency, but

strong associative strength, suggest a more concerted codification of painted dress. Stronger and infrequent, namely consistent and specific, painted dress groupings suggest articulation of a costumed non-verbal communication, which re-contextualizes many of the participants of later 4th – 3rd/2nd century BC Tarquinian tomb painting into almost *dramatis personae*. Bonfante (2003: 28) was correct when surmising that Phersu's dress, which possesses an unusually strong 6th – 5th century BC associative strength of 0.95, seemed to represent some kind of stage costume. Such strong associative cohesiveness amongst painted dress groupings, alongside typological irregularity and a comparatively low frequency, indicate a character with a role that is typified by an essential, obligatory, and formally structured costume. Therefore, more so than earlier 6th – 5th century BC painted dress groupings, later 4th – 3rd/2nd century BC Tarquinian tomb painting deployed costumes similar to those seen on vases, terracotta, and mural paintings depicting ancient Greek theatre (see Bieber, 1961a: vii), which necessitate precisely arranged sartorial attributes to signify their characters. For example, the three essentials of the tragic costume, the mask, the sleeved robe, and the tall buskins, remained an obligatory sartorial signification (despite minor changes, distortions, and exaggerations) until the end of antiquity (Bieber, 1961a: 22) - so too did Doric farce maintain its own costumes and typical characters (Bieber, 1961a: 39). Thus, the outcomes of this research identify an almost theatrical transformation of later 4th – 3rd/2nd century BC painted Tarquinian dress.

Theatrical display repeats strongly associated dress groupings to create characters that present and perform imagined experiences, which align with whatever narrative and thematic perspective had been chosen – be it death, burial, comedy, action, tragedy or a combination of each (Bieber, 1961a: 22). Communicatively speaking this identification re-contextualizes Tarquinian painted tombs as places for viewing. They shift from 6th – 5th century BC displays that mostly recreated commemorative (even celebrative) funerary experience, complete with everyday dress, to almost standardised 4th – 3rd/2nd century BC displays populated with characters cast according to an imagined role and experience, replete with their signifying costumes and narrative attachments. Vanth, Charun, and Phersu, for example, are readily identifiable via their strongly associated dress types (costumes) and their accoutrements and performance, which indicate a more precise and deliberate utilization of painted dress – akin to that demanded by theatrical endeavours.

The methodological underpinnings of this study are applicable to a wide spectrum of archaeological representation, which affords opportunities to similarly re-tailor otherwise unimaginatively or qualitatively analyzed visual representations that depict dress. For example, the clustering methodology can be directly exported to examine the Etruscan tomb paintings found at Blera, Bomarzo, Cerveteri, Chiusi, Cosa, Grotte San Stefano, Heba, Orte, Orvieto, Populonia, San Giuliano, Sarteano, Tuscania, Veii, and Vulci, which would afford a most valuable opportu-

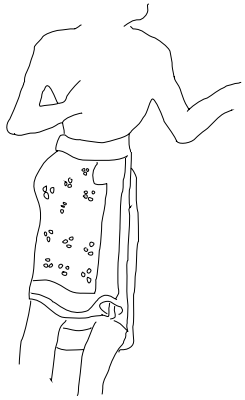
nity for regional comparison of sartorial depiction and non-verbal communication. Future research could too be supplemented by alterations to the methodologies' statistical inquiries, chronological/periodization structure, similarity measures, clustering algorithms, and typologies, which would provide an alternative interrogation of Tarquinian painted dress. Furthermore, with only slight modification the methodology could be utilized to investigate the dressed figured decorations seen on Archaic, Classical, and Hellenistic Etruscan mirrors. Such an analysis would expand on the limited treatment of their dress that is found only in Bonfante (1982: 79 – 88) and (2003). Given their significant cultural functions, enormous range of represented subjects, and commentary on the varying cultural and societal expectations between male and female bodies (see Izzet, 2007: 43), such a quantitative analysis of Etruscan mirror's dress would offer a valuable contribution to on-going debate surrounding interpretations of their figured decoration. Slight modification to this studies' methodology would be required to also examine the dress depicted on Etruscan black-figure and red-figure vase painting. However, moderate methodological development will be necessary to direct this research more toward analyses of Etruscan sculpture, such as statues, statuettes, sarcophagi, votive figurines, and funerary urns, and their myriad depictions of dress.

Future development of this research also need not be confined to an explicitly Etruscan context, visual representation, and/or material culture. This study could be expanded to encompass analyses directed toward examining depictions of Greek, Roman, Minoan or Phoenician dress, or any ancient culture with sufficient artistic representations of their dress. For example, this research could be adapted to sartorially explore Attic black-figure and red-figure vase painting, Greek painted tombs, such as the *Tomb of the Diver* at Paestum, statuettes, such as the Lipari terracotta models of ancient Greek theatre masks and characters, or Roman monuments, such as funerary stele, mosaics, and funerary plaques. Furthermore, this research also need not be confined to examining depictions of ancient dress. Future methodological alteration to the statistical operations underpinning this study would provide it a broader analytical capability and applicability. Therefore, together with specific and appropriate conceptual and theoretical grounding, this research, which focused on quantifying painted dress, could potentially be expanded to incorporate visualization and analysis of the many other components comprising visual representation. For example, depictions of domestic furniture, Greek myth, religion, animals, or architecture could be quantified to similarly identify hitherto unacknowledged organizational structures amidst their modes and means of representation. Thus, future direction of this research is not solely rooted in improving the utilisation of painted dress in the ancient world, but also in enhancing the utilisation of archaeological visual representation via development of methodologies that employ tools and techniques of digital visualisation. Transforming the study of archaeological representation via the application of digital technologies is a key future direction of

this research; as such technology will continue to offer fundamentally new approaches to visualizing, filtering, and processing the hitherto overlooked nuances of such representations.

Rather than dwelling upon connoisseurship, formal analysis, style, typologies and description this study engages contemporary dress theory to create a new analytical model that innovatively utilizes painted Tarquinian dress as a tool for investigating aspects of ancient life, ancient mores, and ancient cultural responses (see Harlow et al, 2005: xiii). The study reassesses Tarquinian tomb painting to investigate its sets of sartorial representation, which are determined to have been deliberately arranged to non-verbally communicate explicitly chosen means and modes of displaying, seeing and viewing the deceased. It identifies significant and previously unrecognized variation between typical 6th – 5th and 4th – 3rd/2nd century BC painted dress structures, which convey the changed premiums placed on sartorial self-representation (see Engelstad, 1991) that are indicative of tomb painting's shifting value as a funerary and communicative medium (see Stewart, 1993: 26). Therefore, the study furthers understanding of the social functions of painted dress, and demonstrates its cultural importance (see Harlow et al, 2005: xii) by not only identifying where, when, how, and why this painted dress 'goes together' (see Barthes, 1973), but also by statistically determining its hitherto unacknowledged relationship between typology, frequency, and associative strength. Identifying the manner of their dressing, or, in certain cases, of not dressing, adds depth to the study of Tarquinian tomb painting, because it prompts consideration and thought of hitherto unrealised, but significant, communicative patterns (see Ribeiro, 1998: 320). Tomb painting provides the necessary structuralist and semiotic relationships, embedded within the social action, cognition, and symbolization typical of artistic representation, to speak of dress, and thus facilitate its innovative and more effective use as an investigative tool in the ancient world (see Tilley, 2006: 7). The novel approach of this study increases the granularity of analytical and interpretative engagement with Tarquinian tomb painting and its dress, as well as also advancing the methodological repertoire for studying dress in the ancient world.

Appendices: Appendix C - Clothing and Adornment Typology



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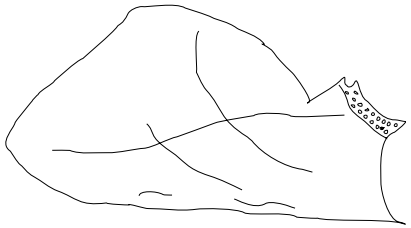

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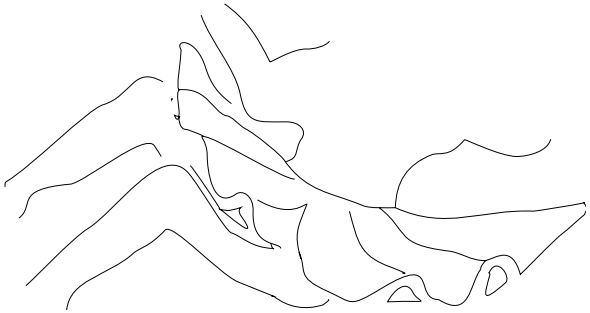

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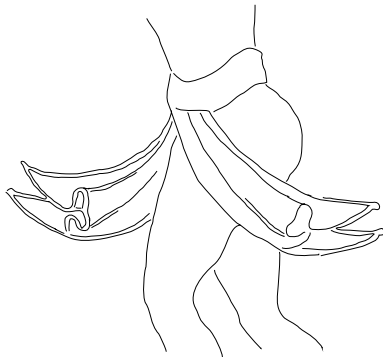

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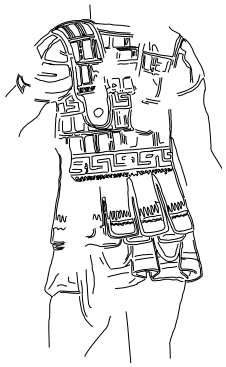

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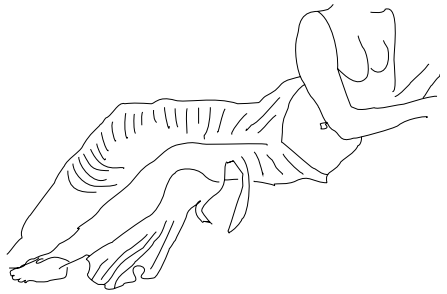

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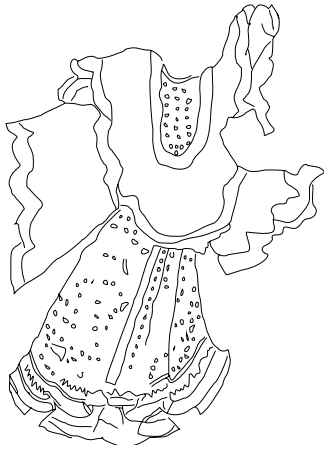

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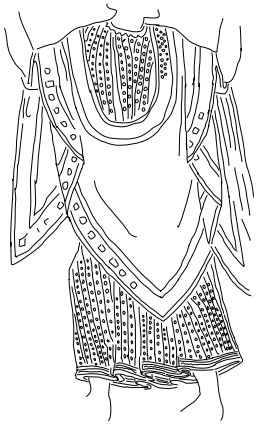

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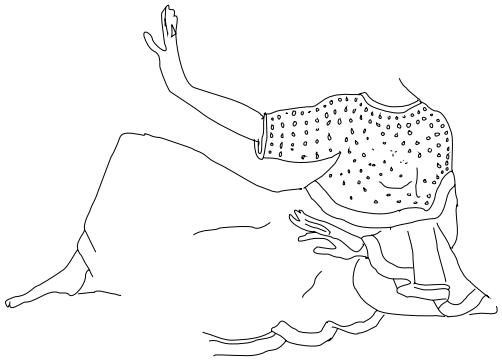

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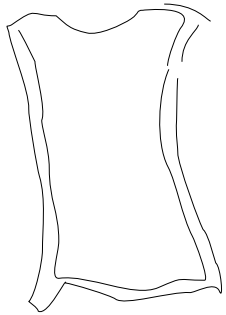

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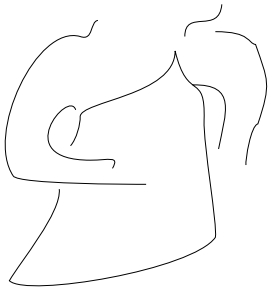

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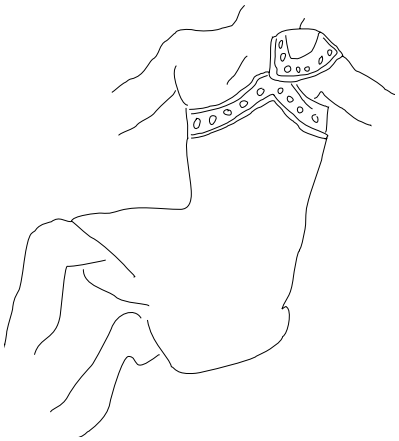

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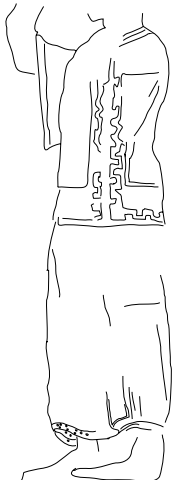

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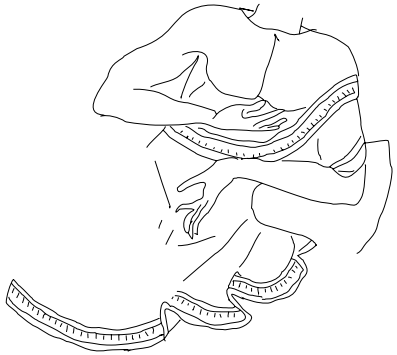

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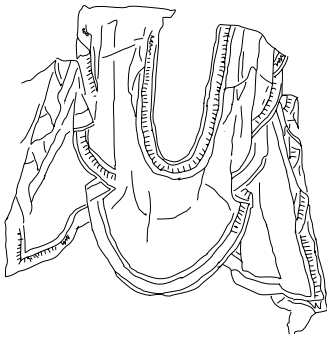

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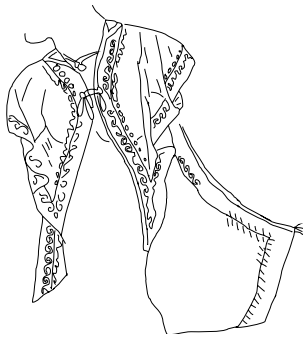

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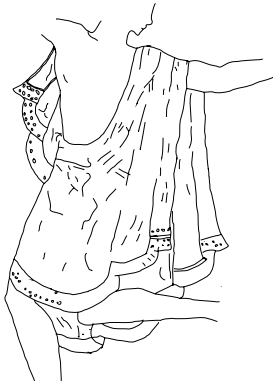

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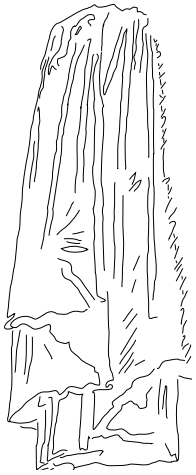

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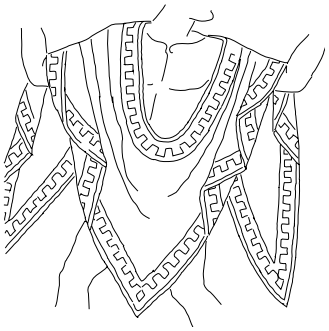

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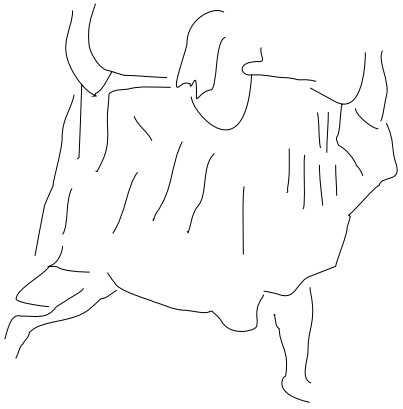

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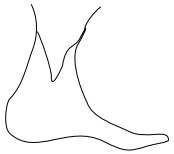

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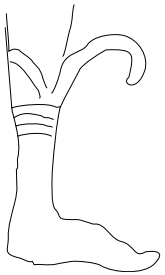

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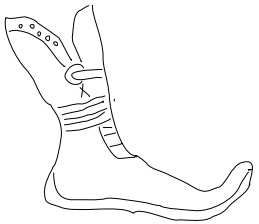

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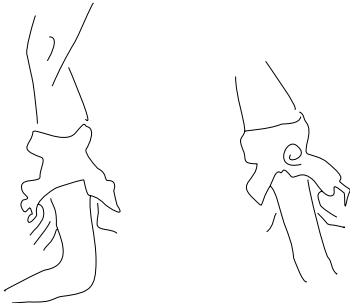

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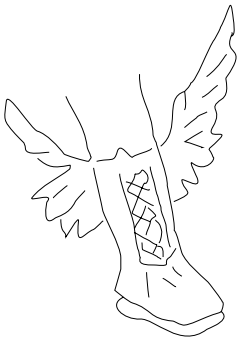

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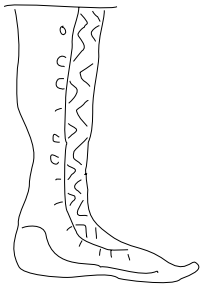

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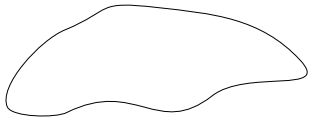

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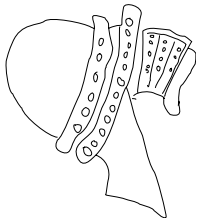

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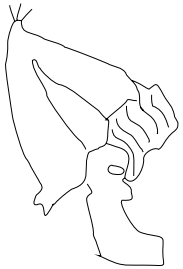

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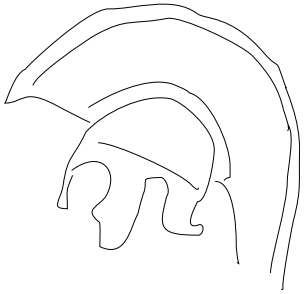

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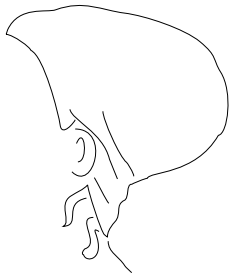

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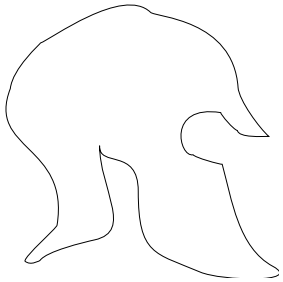

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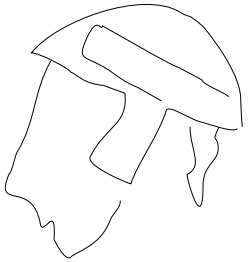

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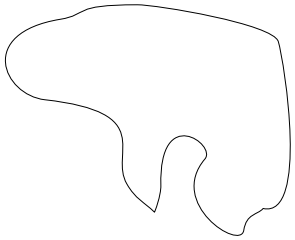

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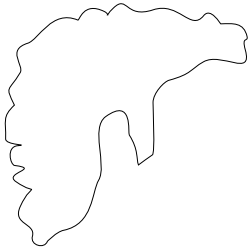

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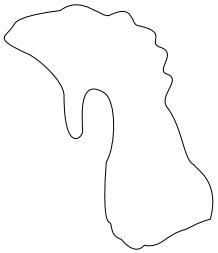

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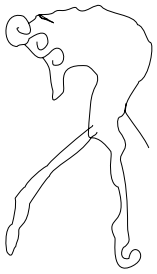

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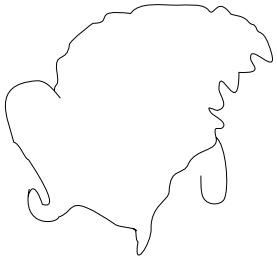

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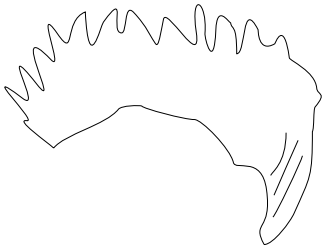

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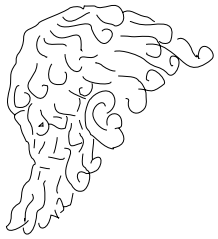

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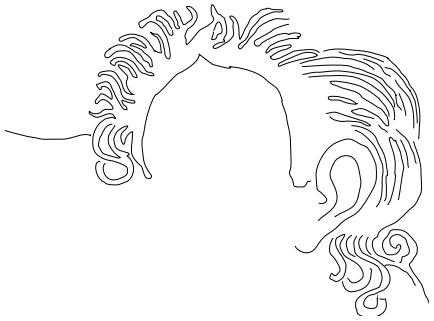

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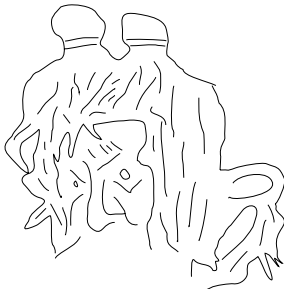

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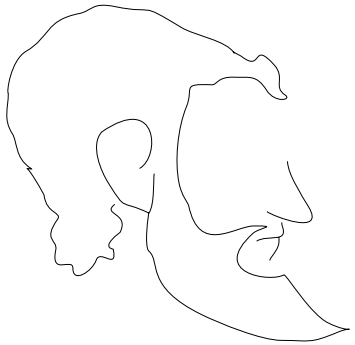

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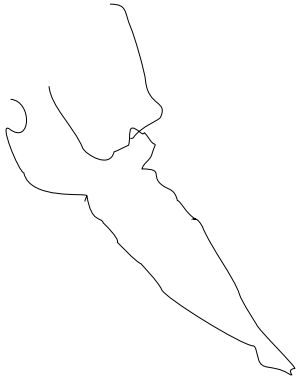

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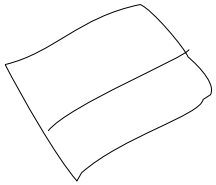

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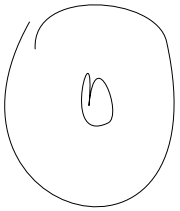

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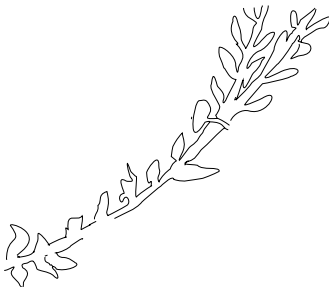

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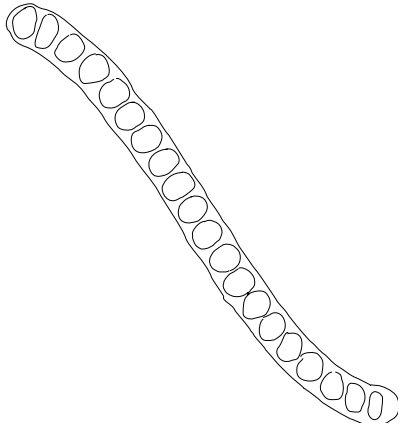

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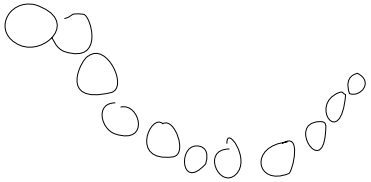

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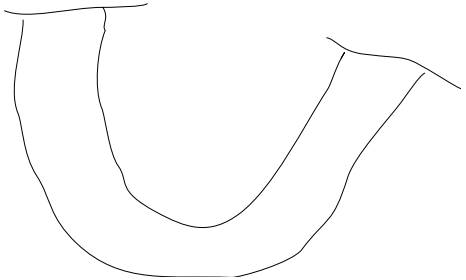

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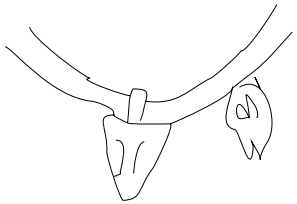

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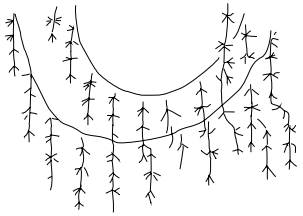

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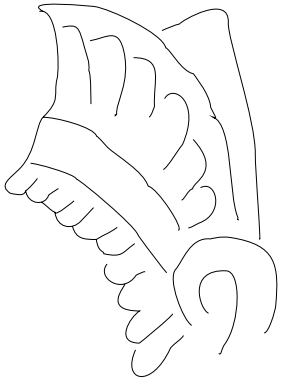

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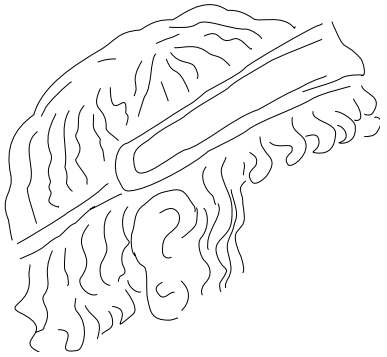

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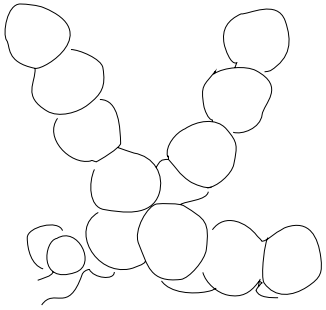

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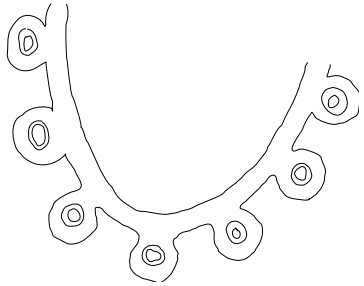

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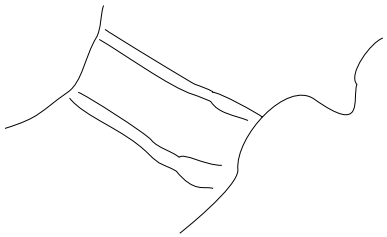

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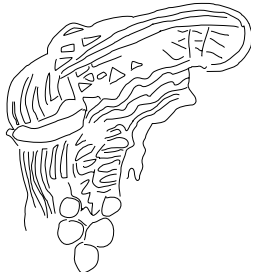

C_Type_93

C_Type_94

Appendix H – Painted Tomb List

Period	Century	Tomb Name	Date	Scene(s)
Orientalizing Period (750 – 550 BC) Tomb No. = 2	6th Century BC (600 – 501 BC) Tomb No. = 29	Tomb of the Panthers	600 – 590 BC	1
		Tomb of the Hut	575 – 550 BC	2
Archaic Period (550 – 475 BC) Tomb No. = 40		Tomb of the Bulls	530 BC	3 - 10
		Tomb of the Jade Lions	530 – 520 BC	11
		Tomb of the Red Lions	530 BC	12
		Tomb 939	530 BC	13
		Tomb 1646	530 BC	14 – 15
		Tomb of the Augurs	520 BC	16 – 19
		Unknown (?)	?	20
		Bartoccini Tomb	520 BC	21 – 23
		Tomb of the Inscriptions	520 BC	24- 41
		Tomb of the Jugglers	520 BC	42 – 44
		Tomb of the Lionesses	520 BC	45 – 50
		Tomb of the Lotus Flower	520 BC	51 – 52
		Tomb of the Mouse	520 BC	53
		Stefani Tomb	520 BC	54
		Tarantola Tomb	520 BC	55
		Tomb of the Tritons	520 BC	56 – 57
		Tomb 5039	520 – 510 BC	58
		Tomb of the Bacchantes	510 – 500 BC	59 – 63
		Tomb of the Baron	510 – 500 BC	64 – 65
		Cardarelli Tomb	510 – 500 BC	67 - 70
		Tomb of the Dead Man	510 BC	71 – 73

Period	Century	Tomb Name	Date	Scene(s)
Archaic Period (550 – 475 BC) Tomb No. = 40	6th Century BC (600 – 501 BC) Tomb No. = 29	Frontoncino Tomb	510 – 500 BC	74 – 76
		Tomb of Hunting and Fishing	510 BC	77 – 85
		Tomb of the Olympiads	510 BC	86 – 89
		Tomb of the Pulcinella	510 BC	90 – 92
		Tomb 1999	510 – 500 BC	93 – 95
		Tomb 3098	510 BC	96 – 97
	5th Century BC (500 – 401 BC) Tomb No. = 28	Tomb 5591	500 – 490 BC	98 - 101
		Tomb 4780	500 BC	102 – 103
		Tomb of the Painted Vases	500 BC	104 – 107
		Tomb of the Old Man	500 BC	109
		Master of the Olympic Games Tomb	500 BC	110 – 112
		Tomb of the Dying	500 BC	113 – 115
		Tomb of the Whipping	490 BC	116 – 119
		Tomb of the Kithara Player	490 – 480 BC	120 – 124
		Tomb of the Bigas	490 BC	125 – 143
		Tomb of the Skull	480 BC	144
		Tomb of the Leopards	480 BC	145 – 147
		Tomb 4021	475 – 450 BC	148 – 149
		Tomb of the Little Flowers	475 – 450 BC	150 – 151
Classical Period (475 – 300 BC) Tomb No. = 31		Tomb of the Triclinium	470 BC	152 – 161
		Tomb of the Funerary Bed	460 BC	164 – 167
		Tomb 5513	450 – 425 BC	168 – 170

Period	Century	Tomb Name	Date	Scene(s)
Classical Period (475 – 300 BC) Tomb No. = 31	5th Century BC (500 – 401 BC) Tomb No. = 28	Tomb 2015	450 – 400 BC	171
		Tomb 994	450 – 400 BC	172
		Tomb of the Ship	450 – 425 BC	173 – 176
		Maggi Tomb	450 – 425 BC	177 – 180
		Francesca Giustiniani Tomb	450 – 425 BC	181 – 183
		Tomb of the Deer Hunt	450 – 425 BC	184 – 188
		Tomb of the Black Sow	450 BC	189 – 193
		Tomb of the Biclinium	425 – 400 BC	196 – 200
		Tomb of the Blue Demons	400 BC	201 – 204
		Tomb of the Cock	400 BC	205 – 208
		Tomb of the Maiden	400 BC	209 – 212
		Querciola I Tomb	400 BC	213 – 233
	4th Century BC (400 – 301 BC) Tomb No. = 16	Bertazzoni Tomb	400 – 390 BC	235 – 242
		Tomb of the Gorgoneion	400 – 390 BC	243 – 247
		Tomb of the Pygmies	400 – 390 BC	248 – 254
		Tomb 808	400 – 390 BC	255
		Tomb 1200	400 – 390 BC	256 – 257
		Tomb 1560	400 – 390 BC	258
		Tomb 3242	400 – 390 BC	259 – 264
		Tomb 3697	400 – 390 BC	265
		Tomb 3713	400 – 390 BC	266 – 271
		Tomb of the Warrior	400 – 350 BC	272 – 275
		Tomb 1822	400 – 350 BC	277

Period	Century	Tomb Name	Date	Scene(s)
Classical Period (475 – 300 BC) Tomb No. = 31	4th Century BC (400 – 301 BC) Tomb No. = 16	Tomb of the Pilaster & Female Figure	350 BC	278
		Ceisinie Tomb	350 BC	279
		Tomb of the Orcus I, II, & III	350 – 325 BC	280 – 290
		Tomb of the Shields	350 – 325 BC	291 – 302
		Tomb of the Giglioli	300 BC	303 – 307
Hellenistic Period (300 – 100 BC) Tomb No. = 17	3rd Century BC (300 – 201 BC) Tomb No. = 15	Tomb of the Tapestry	300 – 290 BC	308
		Tomb of the Mercareccia	300 – 290 BC	309 – 313
		Tomb of the Cardinal	300 – 250 BC	320 – 340
		Tomb of the Meeting	300 – 250 BC	344
		Tomb of the Bruschi	300 – 250 BC	345 – 351
		Tomb of the Charuns	275 – 250 BC	352 – 353
		Tomb of the Garlands	270 BC	354 – 363
		Tomb 5636	250 – 200 BC	364 – 366
		Tomb 5512	250 – 200 BC	367 – 370
		Querciola II Tomb	250 – 200 BC	371
		Tomb of the Typhon	210 – 200 BC	372 – 374
		Tomb 4912	300 – 201 BC	375
		Tomb of the Anina Family	300 – 201 BC	377 – 379
		Tartaglia Tomb	300 – 201 BC	383 – 385
		Tomb of the Sculptures	300 – 201 BC	386
	2nd Century BC (200 – 101 BC) Tomb No. = 2	Tomb of the Dancing Priests	300 – 100 BC	387 – 389
		Tomb 812	300 – 100 BC	390

Glossary: Key Methodological Terms

'ALL'

This label indicates the inclusion of data from every chronological phase — namely the 6th, 5th, 4th, and 3rd/2nd centuries BC - and every type category

Association

When one or more types is associated it means that they are similar, to a specific level of similarity, and that they appear together in the tomb paintings

Associative Strength

Refers to the strength of the association between two or more types that are similar e.g. an associative strength of 0.90 means that the groupings of types are closely associated to one another, while a grouping with an associative strength of 0.50 are not as closely associated

Attributions

An 'other' content type is attributed (associated with) to a clothing and adornment type group if said 'other' content type crosses-over with the given clothing and adornment type grouping when the two are compared in a tree crossover list

Bottom of Dendrogram

The strongest forms of the classifications identified by the clustering analysis are found at the bottom of a dendrogram – the clusters at this level (0.96-1) are small

Clothing and Adornment Type

A recognisable piece of clothing and adornment identified by the application of the 'classification system for types of dress and their properties' (Roach-Higgins & Eicher, 1992: 2)

Clustering Analysis

The task of grouping a set of objects in such a way that objects in a grouping (called a cluster) are more similar to each other than those in other groups (clusters)

Clustering Algorithm

An algorithm that when applied organises objects into groups whose members are similar in some way — the algorithm determines if two or more objects belong to the same cluster if they are 'close' according to a given distance (see **Similarity Measure**)

Combination

A series of clothing and adornment types 'seen' together in the tomb paintings, but not necessarily 'worn together' on a body (weak-mid level of similarity)

Composition

A series of clothing and adornment types 'worn' together on a body in the tomb paintings (strongest level of similarity)

Crossover

Happens when a clothing and adornment type group, or parts of a type group, occurs amidst a grouping of 'other' content types in their respective tree list/dendrogram

C_Type_N

Abbreviation for Clothing and Adornment Type (Number) e.g. C_Type_11

Dendrogram

A tree diagram used to illustrate the arrangement of clusters produced by hierarchical clustering

Exclusion

Clothing and adornment type or 'other' content type excluded from a grouping during a tree crossover list comparison

Frequency

Refers to the number of times a type or grouping of types is depicted within the sample of Tarquinian tomb paintings

Hierarchical Groupings

The groupings are hierarchically arranged from the lowest/weakest to the highest/strongest level of similarity — see **Level of Similarity**

Hypothetico-deductive method

A method that first hypothesises an explanation of a natural or historical process and then deduces what ought to be true if the explanation is correct (Romesburg, 1984: 39)

Inclusion

Clothing and adornment type or 'other' content type introduced into a grouping during a tree crossover list comparison

Level of Similarity

The level of 'associative' strength between two or more similar/dissimilar entities in a dendrogram, which range from 0.50-0.70 (weak similarity), 0.85-0.95 (medium similarity), to 0.96-1 (strong similarity)

'Other' Content Type

'Things' that are depicted alongside the clothing and adornment types in the tomb paintings — arranged into human, natural, cultural, color, and pattern categories e.g. barbiton player, leopard, or dancer

PAST

Software for data analysis, with functions for data manipulation and multivariate statistics (**https://folk.uio.no/ohammer/past/**)

Similarity

The 'associative' strength between two or more types displayed by a dendrogram i.e. a series of similar types are those depicted together, and those types that are dissimilar are not depicted together in the tomb paintings

Similarity Measure

A real-valued function that quantifies the similarity between two objects — they are the inverse of distance metrics and they take on large values for similar objects and either zero or a negative value for very dissimilar objects

Specific-purpose classification

The antithesis of a general purpose classification — it differs in that at the point of classification it has a specific use i.e. relating to specific qualitative or quantitative variables

Top of Dendrogram

The weakest forms of the classifications identified by the clustering analysis are found at the top of a dendrogram – the clusters at this level (0.60-0.65) are large

Tree Branch

A large and clearly defined cluster within a dendrogram

Tree List

A textual reproduction of a dendrogram to facilitate comparison

Tree Crossover List

A comparison between the clothing and adornment type dendrogram/tree list groupings and the 'other' content type dendrograms/tree lists to determine associations

Tree Diagram

see **Dendrogram**

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